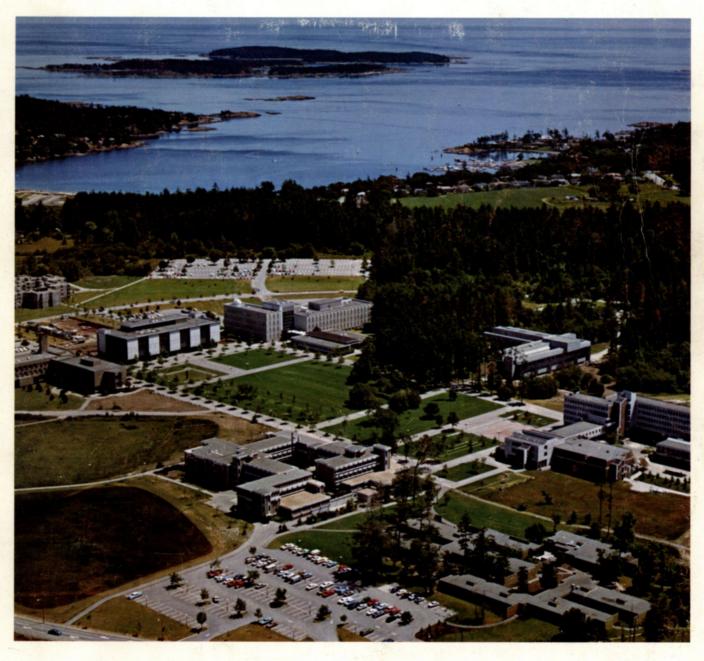


# University of Victoria Calendar 1976/77



# **ENQUIRIES**

The University's telephone number is: (area code 604) 477-6911.

The University's mailing address is: University of Victoria, Box 1700, Victoria, British Columbia, Canada, V8W 2Y2.

Enquiries from prospective students in regard to the following should be directed to the officer or office shown.

#### ADMISSION AND ADVICE ABOUT PROGRAMMES

All Faculties, Schools and Programmes, except Law, Graduate Studies and Public Administration:

Director of Admission Services

Faculty of Law:

Dean, Faculty of Law

Faculty of Graduate Studies:

Dean, Faculty of Graduate Studies

School of Public Administration:

Director, School of Public Administration

#### COUNSELLING

Director, Counselling Centre

#### FINANCIAL AID AND AWARDS

Financial Aid Office

#### DAY CARE

Day Care Centre, 2246 McCoy Road, Victoria, B.C. (477-8646)

#### **HEALTH SERVICES**

Director, University Health Services

#### HOUSING AND RESIDENCE ACCOMMODATION

Manager, Housing and Conference Services

#### PARKING PERMITS

Superintendent, Traffic and Security

#### SUMMER SESSION

Director, Summer Session

#### TEXTBOOKS

Manager, Bookstore

Enquiries from other persons in regard to the contents of this Calendar or the University in general should be directed to the Secretary of Senate.

# OFFICE HOURS

The offices of the University are open throughout the year from 8:30 a.m. to 4:30 p.m., Monday to Friday, except on statutory holidays.

# UNIVERSITY APPLICATION DEADLINES

#### Winter Session

No assurance can be given that applications received after the deadline dates can be processed in time to permit registration in the winter session.\*

- April 30

  Last day for submission of applications for the Faculty of Law, the professional year in the Faculty of Education, the School of Nursing, the School of Public Administration, and the School of Social Welfare.
- May 31 Last day for submission of applications for admission from persons in countries outside Canada for programmes other than those listed above.
- June 1 Last day for submission of applications for admission to the Faculty of Graduate Studies.
- June 30 Last day for submission of applications from returning students for programmes other than those mentioned

Last day for submission of applications for admission to programmes other than those mentioned above from persons in Canada.

- July 31 Last day for submission of applications for admission or re-registration from persons wishing to register in 6 units or fewer in September.\*\*
- September 11 Last day for submission of applications for up-Island evening courses. (Registration in person takes place in Nanaimo on this date. See page ......)
- November 30 Last day for submission of applications from third and fourth year students seeking to register in second term courses only. (Not applicable to students in attendance in the first term.)
  - \*This does not apply to Law applications received after April 30 will not be considered.

#### **Summer Session**

- February 28 Last day for submission of applications for admission for courses beginning in May.
- March 31 Last day for returning students to apply for courses beginning in May.
- April 30 Last day for submission of applications for admission for Summer Session courses beginning in July.

Last day for returning students to apply for Summer Session courses beginning in July. (Not applicable to students taking courses beginning in May.)

N.B. Each of the above dates, except September 11, is a fixed due date. If a fixed date falls on a holiday, Saturday or Sunday, the nearest preceding day of business will be considered as the deadline.

# OTHER UNIVERSITY PUBLICATIONS OF INTEREST TO PROSPECTIVE STUDENTS

A Guide for Secondary School Students

Provides information on the University, programmes and courses offered and procedures to follow in seeking admission. Available from the Director of Admission Services.

Transfer Guide: College-University

Lists college courses and their University of Victoria equivalents. Available from the Director of Admission Services.

Summer Session Supplement

Lists offerings available in the period May through August. Available from the Director, Summer Session.

Division of Continuing Education Supplement

Lists credit offerings available in the late afternoon and evening. Available from the Director, Division of Continuing Education.

Division of Continuing Education Calendar

Lists non-degree programmes; issued in the fall and spring. Available from the Director, Division of Continuing Education.



# UNIVERSITY OF VICTORIA

# Annual Calendar

1976-77

The University of Victoria was established under the terms of the Universities Act (Bill number 63, 1963). A revised statute, the Universities Act (Bill number 157, 1974) provides for the continuation of Convocation, the Board of Governors, the Senate, and the Faculties. It describes the powers and responsibilities of those bodies, as well as the duties of the officers of the University. Copies of this Act are held in the University Library. Persons who wish to purchase copies may do so through the Printer to the Queen's Most Excellent Majesty, The Parliament Buildings, Victoria, British Columbia, Canada.

The University reserves the right to revise or cancel at any time any rule or regulation given in this Calendar.

The Calendar is published annually in the Spring by the Office of the Registrar under authority granted by the Senate of the University.

Cover designed by Department of University Relations.

Printed by Morriss Printing Company Ltd., Victoria, British Columbia.

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# ACADEMIC CALENDAR

#### 1976

JANUARY	FEBRUARY	MARCH	APRIL
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MAY	JUNE	JULY	AUGUST
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
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SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

#### SEPTEMBER 1976

6 Monday Labour Day. Registration in person in all Faculties begins. Details of place and time are mailed to all students receiving notice 7 Tuesday of admission or authorization to re-register in September 1976. No registration in the Professional Years in Education will be accepted after this date. Only day for registration in Faculty of Law. Beginning of School Experience for students in all Professional Years in Education.
First-term classes begin in Faculty of Law. 8 Wednesday Last day of registration.

10 Friday 13 Monday First-term classes begin. First day of period for dropping and adding courses which begin in the first term. 14 Tuesday

15 Wednesday Senate meets.

Last day of 5-day period for late registration with permission. School Experience for Professional Year students 17 Friday in Faculty of Education ends.

20 Monday Board of Governors meets.

First-term classes for professional years in Education begin.

Last day of period for adding courses which begin in the first term. All change forms must be deposited at the Records Office by 4:00 p.m. on this date. 24 Friday

# OCTOBER 1976

6 Wednesday Senate meets. 11 Monday Thanksgiving Day. 15 Friday No refund on first-term fees for courses dropped after this date.

18 Monday Board of Governors meets.

Last day for dropping first-term courses without penalty of failure. All change forms must be deposited at the Records Office by 4:00 p.m. on this date. 29 Friday

Academic Assembly.

#### NOVEMBER 1976

3 Wednesday Senate meets

3	wednesday	Senate meets.
11	Thursday	Remembrance Day.
	Thursday through Friday	Reading break. Classes cancelled.
15	Monday	Board of Governors meets.
DE	CEMBER 1976	
1	Wednesday	Senate meets.
8	Wednesday	Last day of classes in first term, except for Faculty of Law (TBA) and Professional Year students in Faculty of Education.
10	Friday	First-term examinations begin, except for Faculty of Law (TBA) and Professional Year students in Faculty of Education.
		Last day of classes for Professional Year students in Faculty of Education.
13	Monday	First-term examinations begin for Professional Year students in Faculty of Education.
20	Monday	Board of Governors meets.
21	Tuesday	First-term examinations end. End of first term, all faculties.
24	Friday	Christmas Day observance.
27	Monday	Boxing Day observance.
31	Friday	New Year's Day observance.

# ACADEMIC CALENDAR

#### 1976

JANUARY	FEBRUARY	MARCH	APRIL
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MAY	JUNE	JULY	AUGUST
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
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SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

#### SEPTEMBER 1976

6 Monday Labour Day.

7 Tuesday Registration in person in all Faculties begins. Details of place and time are mailed to all students receiving notice of admission or authorization to re-register in September 1976. No registration in the Professional Years in Educa-

tion will be accepted after this date. Only day for registration in Faculty of Law.

Beginning of School Experience for students in all Professional Years in Education.
First-term classes begin in Faculty of Law. 8 Wednesday

Last day of registration. 10 Friday 13 Monday First-term classes begin.

First day of period for dropping and adding courses which 14 Tuesday

begin in the first term.

15 Wednesday Senate meets.

Last day of 5-day period for late registration with per-17 Friday mission. School Experience for Professional Year students

in Faculty of Education ends.

20 Monday Board of Governors meets.

First-term classes for professional years in Education

begin.

Last day of period for adding courses which begin in the 24 Friday

first term. All change forms must be deposited at the

Records Office by 4:00 p.m. on this date.

#### OCTOBER 1976

6 Wednesday Senate meets. 11 Monday Thanksgiving Day.

15 Friday No refund on first-term fees for courses dropped after this

date.

18 Monday Board of Governors meets.

Last day for dropping first-term courses without penalty of failure. All change forms must be deposited at the Records Office by 4:00 p.m. on this date. 29 Friday

Academic Assembly.

#### NOVEMBER 1976

3 Wednesday Senate meets. 11 Thursday Remembrance Day.

11 Thursday through

Reading break. Classes cancelled.

Friday

15 Monday Board of Governors meets.

#### DECEMBER 1976

1 Wednesday Senate meets

Last day of classes in first term, except for Faculty of Law (TBA) and Professional Year students in Faculty of 8 Wednesday

Education.

First-term examinations begin, except for Faculty of Law (TBA) and Professional Year students in Faculty of Education. 10 Friday

Last day of classes for Professional Year students in Faculty of Education.

First-term examinations begin for Professional Year students in Faculty of Education. 13 Monday

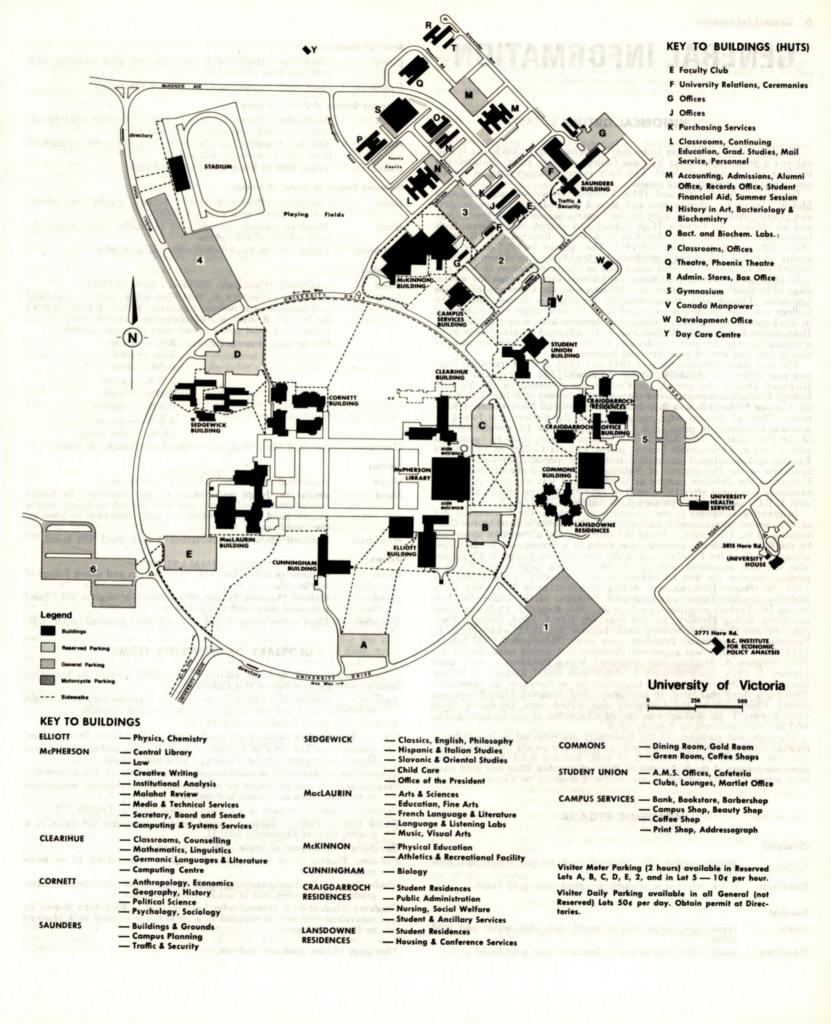
20 Monday

21 Tuesday First-term examinations end. End of first term, all

faculties.

24 Friday Christmas Day observance. 27 Monday Boxing Day observance.

31 Friday New Year's Day observance.



# GENERAL INFORMATION

#### HISTORICAL OUTLINE

The University of Victoria came into begin on July 1, 1963, but it had enjoyed a prior tradition as Victoria College of sixty years' distinguished teaching at the university level. This sixty years of history may be viewed

Conveniently in three distinct stages.

Between the years 1903 and 1915, Victoria College was affiliated with McGill University, offering first and second year McGill courses in Arts and Science. Administered locally by the Victoria School Board, the College was an adjunct to Victoria High School and shared its facilities. Both institutions were under the direction of a single Principal: E. B. Paul, 1903-1908; and S. J. Willis, 1908-1915. The opening in 1915 of the University of British Columbia, established by Act of the Legislature in 1908, obliged the College to suspend operations in higher education in Victoria.

In 1920, as a result of local demands, Victoria College began the second stage of its development, reborn in affiliation with the University of British Columbia. Though still administered by the Victoria School Board, the College was now completely separated from Victoria High School, moving in 1921 into the magnificent Dunsmuir mansion known as Craigdarroch. Here, under Principals E. B. Paul and P. H. Elliott, Victoria College built a reputation over the next two decades for thorough and scholarly instruc-

tion in first and second year Arts and Science.

The final stage, between the year 1945 and 1963, saw the transition from two year college to university, under Principals J. M. Ewing and W. H. Hickman. During this period, the College was governed by the Victoria College Council, representative of the parent University of British Columbia, the Greater Victoria School Board, and the provincial Department of Education. Physical changes were many. In 1946 the College was forced by post-war enrolment to move from Craigdarrich to the Lansdowne campus of the Provincial Normal School. The Normal School, itself an institution with a long and honourable history, joined Victoria College in 1956 as its Faculty of Education. Late in this transitional period (through the cooperation of the Department of National Defence and the Hudson's Bay Company) the 284-acre campus at Gordon Head was acquired. Academic expansion was rapid after 1956, until in 1961 the College, still in affiliation

with U.B.C., awarded its first bachelor's degree.

In granting autonomy to the University of Victoria, the Universities Act of 1963 vested administrative authority in a Chancellor elected by the Convocation of the University, a Board of Governors, and a President appointed by the Board; academic authority was given to a Senate which was representative both of the Faculties and of the Convocation. Joseph B. Clearihue, sentative both of the Faculties and of the Convocation. Joseph B. Clearihue, who was first associated with the former Victoria College in 1902 as a student, became the first Chancellor of the University in the autumn of 1963. W. Harry Hickman was Acting President until July 1964 when Malcolm Gordon Taylor was appointed President of the University. Following Dr. Taylor's resignation on June 30, 1968, Robert T. D. Wallace was appointed Acting President for one year. On July 1, 1969, Bruce J. Partridge became President, serving until January 31, 1972, when Hugh E. Farquhar was appointed President (pro tem). Subsequently, on July 1, 1972, Dr. Farquhar was appointed President and served until August 31, 1974. Stephen A. Jennings was appointed Acting President to serve until 1974. Stephen A. Jennings was appointed Acting President to serve until January 1, 1975, when Howard E. Petch took office. Richard B. Wilson January 1, 1975, when Howard E. Petch took office. Richard B. Wilson was elected Chancellor of the University by acclamation in September 1966 for a three year term. In December 1969, Roderick Haig-Brown was elected Chancellor of the University and served until December 1972, when Robert T. D. Wallace was elected Chancellor of the University. Dr. Wallace was re-elected in January 1976.

The historical traditions of the University are reflected in its academic regalia. The B.A. hood is of solid red, a colour that recalls the early affiliation with McGill. The B.Sc. hood. of gold. and the B.Ed. hood, of blue.

tion with McGill. The B.Sc. hood, of gold, and the B.Ed. hood, of blue, show the colours of the University of British Columbia. Blue and gold have been retained as the official colours of the University of Victoria.

#### **ACADEMIC REGALIA**

Chancellor

Gown purple corded silk, trimmed with purple velvet and gold

Headdress black velvet mortarboard, trimmed with gold braid.

President

Gown royal blue corded silk, trimmed with blue velvet and gold

Headdress black velvet mortarboard, trimmed with gold braid. **Board of Governors** 

Cambridge (Doctor of Music) pattern, grey material, with Gown

gold and blue ribbon trim.

black cloth mortarboard, with black silk tassel. Headdress

Honorary Degree of Doctor of Laws

Cambridge (Doctor of Music) pattern, scarlet wool broad-Gown

cloth, trimmed with blue-purple silk taffeta.

Aberdeen pattern, outside shell of scarlet wool broadcloth, Hood

lined with blue-purple silk taffeta.

Headdress Tudor style in black velvet with red trim.

Honorary Degree of Doctor of Science

Gown Cambridge (Doctor of Music) pattern, scarlet wool broad-

cloth, trimmed with gold silk taffeta.

Aberdeen pattern, outside shell of scarlet wool broadcloth, lined with gold silk taffeta. Hood

Headdress Tudor style in black velvet with red cord trim.

**Bachelors** 

Gown traditional (Canadian) Bachelor's style, in black.

Hood Aberdeen pattern (B.A., B.Sc. and B.Ed., without neckband and finished with two cord rosettes; B.F.A., B.Mus., B.S.N.,

B.S.W., LL.B. with mitred neckpiece), outside shell of silk taffeta in a solid colour, lined with identical material.

Faculty colours are as follows: B.A. — scarlet B.Sc. — gold

B.Ed. - blue

B.F.A. - green

B.Mus. - pink

B.S.N. - apricot

B.S.W. - citron

LL.B. - blue purple

Headdress standard black cloth mortarboard with black silk tassel.

Mosters

Gown traditional (Canadian) Master's style in black.

Hood similar in design and colour to the respective Bachelor's hoods (M.P.A. - russet), but with mitred neckpiece and a

narrow band of black velvet one inch from edge of hood on

the outside only.

Headdress standard black cloth mortarboard with black silk tassel.

Doctors

Gown Cambridge style, black silk, front facings and sleeve linings of

scarlet silk

Oxford Doctor's Burgon shape, shell of scarlet silk, lined with blue silk, border of gold silk. Hood

Headdress Black velvet mortarboard with red tassel fastened on left side.

# GLOSSARY OF UNIVERSITY TERMS

New students will find the following definitions helpful in becoming familiar with the contents of this Calendar.

Auditor - A student who pays a fee to sit in on a course without the right to participate in any way. Auditors are not entitled to credit.

Award — See list of definitions on page 166.

Class — The standing obtained for graduation, i.e. First Class, Second Class. Concentration - The area or subject of specialization within the General Degree programme in the Faculty of Arts and Science.

Convocation - Academic assembly; body of graduates of the University. Corequisite - A specific course or requirement which must be undertaken at the same time as a prescribed course.

Course - A particular part of a subject studied, such as English 111.

Credit Unit - Positive numerical value used in assigning the value of a course, such as Economics 100(3).

Discipline - A subject of study within a department.

Full-time Student - An undergraduate student undertaking 12 or more units of study.\*

Grade Point - Positive numerical value given to an alphabetical letter grade used in assessment of academic performance.

Graduate Student - A student who has received a Bachelor's degree or equivalent and who is enrolled in a programme leading to a Master's or Doctoral degree.

<sup>\*</sup>See page 142 for graduate students.

Lower Level - Courses numbered between 100 and 299.

Major - The subject or area of specialization or emphasis in a degree programme in the Faculty of Arts and Science or in the Faculty of Fine Arts.

Part-time Student — An undergraduate student undertaking fewer than 12 units of study.\*

Prerequisite - A preliminary requirement which must be met before registration in a prescribed course.

Probation - A period of trial for a student whose registration is subject to academic conditions.

Programme - The courses of study organized to fulfil an academic objective, such as a B.Sc. programme.

Registration - Formal enrolment in courses.

Regular Student - A student who is registered as a candidate for a University of Victoria degree, or as a candidate for the University of Victoria Diploma in Education.

Section — The division of a course, e.g. Section 01 of French 100.

Session - Designated period of time during which courses of study are offered, i.e., Winter Session, Summer Session.

Special Student - A student who is admitted to credit courses but who is not a candidate for a University of Victoria degree.

Student - A person who is enrolled in a credit course.

Term - A period of time in the academic year: a term in the Winter Session consists of 13 weeks, in the Summer Session, approximately 3

Transcript - A copy of a student's permanent academic record.

Undergraduate Student - A student registered in an undergraduate faculty or in a programme leading to a Bachelor's degree or an undergraduate

Upper Level - Courses numbered between 300 and 499.

Year — A minimum of 15 units of courses; the level within a programme of study or the level of a course, e.g. First Year student, First Year course (Physics 101).

\*See page 142 for graduate students.

# ACADEMIC YEAR

The Winter Session is divided into two terms — the first, September to December; the second, January to April. The period May through August is administered under Summer Session. The Calendar Supplement for Summer Session is published separately. A list of credit courses offered in the late afternoon and evening is also published separately.

#### PROGRAMMES OFFERED

For the academic year 1976-77 the University offers the following degrees through the Faculty of Arts and Science, the Faculty of Education, degrees through the Faculty of Arts and Science, the Faculty of Education, the Faculty of Fine Arts, the Faculty of Graduate Studies, the Faculty of Law, the School of Nursing, the School of Public Administration, the School of Social Welfare, the Child Care Programme: Bachelor of Arts; Bachelor of Education (a five-year degree preparing teachers for the elementary and secondary schools of the Province); Bachelor of Fine Arts; Bachelor of Laws; Bachelor of Music; Bachelor of Science; Bachelor of Science in Nursing; Bachelor of Social Work; Master of Arts; Master of Eduation; Master of Fine Arts; Master of Music; Master of Public Administration: Master of Science: Doctor of Philosophy, Also offered are Diplomatical Control of Control of Philosophy, Also offered are Diplomatical Control of Control of Philosophy, Also offered are Diplomatical Control of Control of Philosophy, Also offered are Diplomatical Control of Control of Control of Control of Philosophy, Also offered are Diplomatical Control of Control istration; Master of Science; Doctor of Philosophy. Also offered are Diploma Programmes in Education for graduates seeking teacher certification and for persons wishing to teach native languages.

# CHOICE OF PROGRAMME

In choosing undergraduate degree programmes, students are strongly urged to consult the Calendar prescriptions for the degree programme desired. In particular, students choosing the Bachelor of Science degree should normally have taken mathematics and science courses in senior secondary school.

Students who register in the Faculty of Arts and Science or the Faculty of Fine Arts and who intend to undertake studies at a later date in the Faculty of Education should plan their programmes with this in mind. Advice may be obtained from the Advising Centre of the Faculty of

Education.

# PRE-PROFESSIONAL STUDIES

Students who intend to complete a year or two of studies and then transfer to another university are urged to design their programme so that they will meet the requirements of the other institution they plan to attend. In this connection, by proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Engineering, Forestry, and the second year of Agriculture, Physical Education, Pharmacy, at certain other universities. Courses preparatory to Medicine, Dentistry, Architecture, etc., may be taken at the University for studies elsewhere. See page 164 Pre-Professional Education. Advice may be obtained from the Advising Centre of the Faculty of Arts and Science.

# ENTRANCE AWARDS AND FINANCIAL AID

The University offers a number of scholarships to students entering from senior secondary schools in British Columbia. Complete details about these awards and other entrance awards offered by agencies outside the University are found on page 166ff.

Financial aid schemes open to all students attending the University are

described on page 173ff.

Information in regard to entrance awards and financial aid may be obtained from the Financial Aid Office, whose personnel will be pleased to give whatever advice and assistance they can.

#### LIMITATION OF ENROLMENT

The University reserves the right to limit enrolment, and to limit the registration in, or to cancel or revise, any of the courses listed. The current of the ricula may also be changed, as deemed advisable by the Senate of the University.

Except in special circumstances, no student under the age of sixteen may be admitted to the First Year, or under the age of seventeen to the Second

#### **CATEGORIES OF STUDENTS**

Each student who has been authorized to register in a Faculty or School other than Graduate Studies is designated as one of the following:

Candidate for a degree 1. Regular student

Candidate for a diploma in Education

2. Special student

Students registered in the Faculty of Graduate Studies should refer to categories of students given on page 142.

# CLASSIFICATION OF STUDENTS BY YEAR

Classification of Regular Students by Year is based on the number of units completed, as follows:

Below 12 units First Year 12 to 26.5 units Second Year 27 to 41.5 units Third Year

42 units or above Fourth Year (4 year programmes) 42 to 56.5 units Fourth Year (5 year B.Ed. only) 57 units or above Fifth Year (5 year B.Ed. only)

Students registered in the Diploma in Education and Special Students are unclassified as to Year.

# **COURSE VALUES AND HOURS**

Each course which is offered for credit has a unit value. A full course normally has a value of 3 units. In the course outline given in each of the Faculties, the number of units assigned to each course is given in brackets immediately following the course number. Thus ANTH 305 (1½) indicates that Anthropology 305 has a value of 1½ units.

The hours assigned for lectures, laboratory or practical sessions and tutorials in a course are indicated in the following examples:

(2-3; 2-3) — 2 hours lecture and 3 hours laboratory or practical session per week, both terms.

(2-3)- 2 hours lecture and 3 hours laboratory or practical session per week, one term only.

(2-1-1; 2-1-1) - 2 hours lecture, 1 hour laboratory or practical session and 1 hour tutorial per week, both terms.

(3-0-1)- 3 hours lecture and 1 hour tutorial per week, one term

The term in which a one-term course is given is indicated by the use of one of the following:

> September-December only. January-April only.

# LECTURE AND LABORATORY SCHEDULE

The schedule of classes for the Winter Session is published in early July.

#### **EXAMINATION TIMETABLES**

Timetables are posted on official University bulletin boards approximately two weeks before the dates announced for the beginning of Christmas and April examinations.

# RE-REGISTRATION

All enquiries relating to re-registration in undergraduate faculties should be addressed to the Administrative Registrar, Records Office.

#### APPLICATION FOR RE-REGISTRATION

- Students who were registered in a previous session at the University must submit an Application for Re-Registration to the Records Office by the dates shown on the inside front cover.
- 2. A student who has been required to withdraw from the University in the past because of unsatisfactory progress and who wishes to be considered for re-registration must include with his application a letter, addressed to the Senate Committee on Admission and Re-registration, c/o the Records Office, which states why the student believes his application should be accepted. This letter should be accompanied by letters of support from persons who have employed the student since his last attendance or who have knowledge of his abilities and circumstances.

Any such student whose request for re-registration results in a negative decision has the right of final appeal to the Senate. Letters of appeal should be addressed to the Secretary of Senate, and should include a statement of the grounds on which the appeal is being made. All such appeals must be lodged with the Secretary of Senate by at least two weeks prior to the commencement of classes.

- 3. Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of post-secondary level attended and to submit official transcripts of their academic records at the institutions attended, by the due date mentioned above.
- If the results of deferred examinations affect the standing of a student, his Authorization to Re-register will not be issued until examination results are available.

# **ADMISSION**

All enquiries relating to admission to faculties and schools other than Graduate Studies and Law should be addressed to the Director of Admission Services. Enquiries relating to admission to the Faculty of Graduate Studies should be address to the Dean of Graduate Studies. (See page 142.) Enquiries relating to admission to the Faculty of Law should be addressed to the Dean of Law. (See page 155.)

#### APPLICATION FOR ADMISSION

- 1. Persons seeking admission for the first time must obtain an Application for Admission form from the Director of Admission Services. This form will be available after March 1 and must be returned, fully completed and accompanied by all official transcripts of academic records, to the Director of Admission Services by the dates shown on the inside front cover.
- 2. A student who experiences difficulty in obtaining official transcripts or other documents should still submit his application by the due dates mentioned. This will indicate to the Admissions Office that the student is seeking a place and would like one retained for him.
- 3. Students are reminded that all questions on the application form must be answered. In particular, students applying for financial aid must be able to give their Social Insurance numbers. For example, Government requires that applicants for Canada Student Loans have a Social Insurance number. Application for a number may be made through Canada Manpower.
- 4. Persons applying for admission to the 1976 Summer Session who plan to attend the Winter Session 1976-77 must submit an Application for Re-registration to the Records Office (see above), and may apply for Winter Session up to the end of the first week of classes in the Summer Session, without penalty.
- Persons seeking admission to the School of Public Administration should consult page 159.

- 6. Each applicant applying for the first time must submit two copies of official transcripts of secondary school records and of any higher studies taken. These statements must accompany the Application for Admission form. Every applicant is required to state the names of all educational institutions of secondary or higher level attended and to submit evidence of the standing obtained at each. Applicants who hold a B.C. teaching licence or certificate must apply a photo-copy of the teacher's card. In addition, candidates who undertook formal teacher-training more than ten years ago must present with their application recent reports on their teaching effectiveness from Principals and/or Superintendents. These candidates must also supply a written résumé of their teaching experience.
- 7. Each applicant whose academic records, in whole or in part, originate outside the Province of British Columbia must pay an Evaluation Fee of \$10. This fee, which is not refundable and which is not applicable to tuition fees, must accompany the Application for Admission or must be paid when evaluation of documents is requested prior to application being made.
- Candidates presenting transcripts from academic institutions outside North America may be required to supply a catalogue or syllabus showing the description of courses studied and the duration of those courses.
- Transcripts in languages other than English or French must be submitted together with official, notarized translations into English or French.
- 10. The University reserves the right to limit enrolment. In addition, although an applicant may be admissible to the University, it may not be possible to grant him entry to the specific programme he would wish to follow.
- 11. Applicants should consult the admission requirements for each Faculty since, in certain cases, the applicant must demonstrate special aptitudes beyond the normal academic requirements, e.g. in Music, Visual Arts, Physical Education, etc.
- 12. All applicants will be informed in writing of their acceptance or rejection as soon as their applications can be processed by the Admissions Office. Applicants should not anticipate and should wait for written confirmation before setting out for University. This is particularly applicable to applicants who live at some considerable distance from Victoria.
- 13. An applicant who does not meet the published requirements for admission to the University owing to exceptional circumstances may apply for a waiver of the specific admission regulation to the Senate Committee on Admission and Re-registration, c/o the Director of Admission Services. Such a request should be accompanied by the required application form and documents mentioned above and any letters of support from persons who are familiar with the applicant's abilities and circumstances.
- 14. Any applicant, including those mentioned in paragraph 13, above, whose application for admission is rejected and who is able to provide information that was not presented initially may request in writing to the Senate Committee on Admission and Re-registration, c/o the Director of Admission Services, that his application be reconsidered. Such a request should include the additional information together with any supporting documents from persons familiar with the applicant's abilities and circumstances.

Any such candidate whose request for reconsideration results in a negative decision has the right of final appeal to the Senate. Letters of appeal should be addressed to the Secretary of Senate, and should include a statement of the grounds on which the appeal is being made. All such appeals must be lodged with the Secretary of Senate by at least two weeks prior to the commencement of classes.

15. The University of Victoria does not require applicants to undertake the aptitude and achievement tests administered by the College Entrance Examination Board (CEEB). Applicants, particularly those from outside British Columbia, may, if they so desire, include the results of such tests when making application for admission. These results, however, will not be accepted in lieu of the published requirements for admission.

#### **ADMISSION REQUIREMENTS**

The following regulations notwithstanding, the University reserves the right to reject applicants for admission on the basis of their overall academic records, even if they technically meet entrance requirements:

# 1. APPLICANTS FROM BRITISH COLUMBIA AND YUKON SECONDARY SCHOOLS

The qualifications below are approved by the Senate of the University. Enquiries relating to Secondary School Graduation should be addressed to the Department of Education, Victoria, B.C., or to the Superintendent of the applicant's school district.

#### (A) GRADUATES OF BRITISH COLUMBIA AND YUKON SECONDARY SCHOOLS:

Admission in September 1977: The University reserves the right to establish a list of specified subjects of which a minimum number will be required of all students applying for admission. If such a list is established, the University will notify the Secondary Schools of the Province by May, 1976.

The requirement for admission to the University in 1976-77 is graduation from senior secondary school, as prescribed by the Department of Education of the Province of British Columbia, with:

- (i) an average of at least C+, taken over all Grade XI and XII subjects passed; and
- (ii) credit in Mathematics 11 (academic) and one Science or Language course at the Grade XI level.

Normally, applicants must have fulfilled the above requirements by June of

the year in which admission is being sought.

The requirements for admission to specific programmes offered by the Faculties and Schools of the University are shown below, under Programme Prerequisites.

Applicants whose average, taken over all Grade XI and XII subjects passed, is between C and C+ will be considered for admission by the Senate Committee on Admission and Re-registration which will make a general assessment, based primarily upon performance in academic subjects, of their capacity for success at the University.

Although normally all applicants will be required to meet (ii) above,

Although normally all applicants will be required to meet (ii) above, graduates lacking this requirement may be considered for admission into certain programmes. Such applicants are invited to apply in the normal

way, making sure that they state their choice of programme.

Applicants may not receive University credit for senior secondary school courses. However, applicants with high standing may be granted advanced placement. Such applicants are invited to consult with the departments concerned prior to registration in courses

concerned prior to registration in courses.

The above regulations apply to the graduates of both public senior secondary schools and schools which hold membership in the British Columbia Federation of Independent School Associations or in the Independent

Schools Association of British Columbia.

#### PROGRAMME PREREQUISITES

For the convenience of applicants who have graduated from British Columbia senior secondary schools, the secondary school course requirements specified for entry into programmes offered within the faculties and departments of the University are assembled in the following list.

#### Faculty of Arts and Science

#### Department of Anthropology

No requirements for Anthropology 100, but Mathematics 11, a Science 11 and a Language 11 are recommended for Anthropology 200, 240 and 250

#### Department of Bacteriology & Biochemistry

See requirements for the Departments of Chemistry, Mathematics and Physics. Chemistry 12, Mathematics 12 and Physics 12 are recommended.

#### Department of Biology

Students having completed Biology 11 and 12 and intending to major in Biology may enter directly into 200 level Biology courses for which Biology 150 is prerequisite. Students intending to major in Biology must have Biology 11, Mathematics 11 and 12, Chemistry 11, and Physics 11. It is recommended that students also take as many of the following courses as possible: Biology 12, Chemistry 12, and Physics 12.

#### Department of Chemistry

Except as noted below, students wishing to enter Chemistry 120 must have passed at least Chemistry 11 and Mathematics 12, and students wishing to enter Chemistry 124 must have passed Chemistry 12 and Mathematics 12. All students are strongly advised to take Physics 11 and, for Chemistry 124, Physics 12 in addition to these requirements. Students who lack the above Chemistry requirements will be required to register in special sections with four lectures per week of Chemistry 120 and 124. Students who lack the Mathematics prerequisite will be strongly recommended to enrol in Mathematics 012 concurrently.

#### **Department of Classics**

There are no prerequisites for Latin 100 or Greek 100 or for Classical Studies courses. Latin 200 requires at least one year, preferably two years, of secondary school Latin or permission of the Department.

#### **Department of Economics**

Mathematics 11 is required to take any course in Economics, including courses leading to a General degree. Students who plan to take a Major or Honours degree in Economics should take Mathematics 12 as well.

#### Department of English

Students wishing to take a major or honours degree in English should complete Literature 12.

#### French Language and Literature

French may be studied without prerequisites. Students who wish to begin the study of French are admissible to French 100. French 11 is required for entry into French 160. French 12 is required for entry into French 180.

#### Department of Geography

Mathematics 11 is required and Mathematics 12 is recommended.

#### Department of Germanic Languages and Literature

Students may begin the study of German at the University. Students with one or two years of German, i.e., Ger. 9 and 10, or Beg. Ger. 11, are placed in German 140. Those with three or more years of study will be placed at an appropriate level.

#### Department of Hispanic and Italian Studies

Spanish and Italian may be studied without prerequisites. Students presenting Spanish from secondary school may be granted special placement.

#### Department of History

There are no specific prerequisites, but English Literature 12 and History 12 are recommended.

#### Department of Linguistics

There are no specific prerequisites but the Department recommends a knowledge of a second language or Mathematics 12.

#### Department of Mathematics

Students must complete Mathematics 12. However, Mathematics 11 is sufficient for entry into Mathematics 160 (required for B.Ed. Elementary).

#### Department of Philosophy

There are no specific prerequisites.

#### Department of Physics

Mathematics 12 is required for entry into the Physics and Astronomy programmes; Physics 11 and 12 are expected, although students lacking Physics 11 or 12 may enter the programmes by registering in special sections of the first year Physics course. Students planning to take the honours programme should normally also have completed Chemistry 11 or 12. Advanced placement in Physics is available for students with high standing in both Mathematics 12 and Physics 12.

#### Department of Political Science

There are no specific prerequisites but students are urged to take Mathematics to at least the 11 level.

#### Department of Psychology

1976: Mathematics 11 and a Science 11 are required for Psychology 100. Students are advised to take one of these subjects at the 12 level.

1977: Mathematics 11 and a Science 11 are required for any course in Psychology including courses leading to a General degree. Students who plan to take a Major or Honours degree in Psychology should take Mathematics 12 and a Science 12 as well.

#### Department of Slavonic and Oriental Studies

The study of Russian, Chinese, Japanese, Serbo-Croatian may be undertaken without prerequisites from secondary school.

#### Department of Sociology

Mathematics 11 and a Science 11, or Mathematics 11 and 12, or a Science 11 and 12, are required.

#### Child Care Programme

See page 157 for Basic Programme; for prerequisites, check this section under each of the Departments concerned.

#### Faculty of Education

It may be necessary to restrict admission to the Faculty of Education. Should this become necessary, criteria for admission will be available from the Admissions Office.

Prospective students for the Bachelor of Education (Elementary Curriculum) are required to have Mathematics 11 and a science course in Grade XI or XII. It is also recommended that they have Biology 11, Chemistry 11, Physics 11, and English Literature 12. Students are referred to departmental requirements in the Faculty of Arts and Science when considering their selection of teaching areas of study. The teaching areas of study for the B.Ed. (Elementary Curriculum) are given on pages 113 to 115 of the Calendar.

Prospective students for the Bachelor of Education (Secondary Curriculum) are referred to departmental requirements in the Faculty of Arts and Science when considering their selection of teaching areas of study. The teaching areas of study for the B.Ed. (Secondary Curriculum) are given on pages 116 to 120 of the Calendar.

Prospective students for the Physical Education Programme are required to have Mathematics 11 and a science in Grade XI. It is also recommended that they have Biology 11, Chemistry 11, Physics 11, and English Literature

Candidates for the Industrial Education programme should take Math 11 and Physics or Chemistry at the Grade XI or XII level, in addition to their Industrial Education courses.

#### Faculty of Fine Arts

There are no specific secondary school prerequisites for entry into History

in Art, Music, Theatre and Visual Arts.

(However, in Music and Theatre, auditions are required: see pages 133

and 136.)

#### SPECIAL ADMISSION OF DISTINGUISHED STUDENTS STILL REGISTERED IN SENIOR SECONDARY SCHOOLS IN BRITISH COLUMBIA

- (i) Distinguished senior secondary school students may apply for conditional admission to the University prior to graduation from their secondary school provided that the following criteria are met:
  - a. The student must be recommended by the Principal of his school.
  - b. The student must be maintaining a B average in all his subjects and an A average in the discipline he wishes to study at the University. If the student elects a discipline not taught in his secondary school, his Principal must make a special recommendation, in writing, stating the student's particular aptitudes.
  - c. The University department concerned must support the student's application.
  - d. The student must be completing a total of at least 12 courses in Grades XI and XII leading to graduation and should normally be taking as many courses as are required for access to scholar-ships offered by the Government of the Province.
- (ii) Students interested in undertaking courses and who have satisfied the criteria in (i) a. to d. above should apply to the Director of Admission Services by June 30 for full year courses or half-year courses in either term, Winter Session 1976-77.
- (iii) The University will accept applicants who have met the above criteria and will register them as "special students" in no more than 6 units of work in any given academic session.
- Credit towards a degree will be granted by the University for courses successfully completed when the student is authorized to register in a degree programme.

#### (C) ADMISSION FROM BRITISH COLUMBIA GRADE XIII

Applicants who have graduated from senior secondary schools in British Columbia and who have undertaken studies in the curriculum of the former Grade XIII of British Columbia will be considered on an individual basis. Those with good records will be admissible; those with marginal records will be considered by the Senate Committee on Admission and Re-registration, which will judge each case separately.

# 2. GRADUATES OF SECONDARY SCHOOLS OUTSIDE BRITISH COLUMBIA

Those applicants who are admitted will normally be placed in First Year but, on recommendation of the appropriate Department or Division, may be granted advanced placement or exemption without unit credit, as described under Academic Regulations (page 12).

#### (A) GRADUATES OF CANADIAN SECONDARY SCHOOLS:

In addition to meeting the requirements described under the section titled Programme Prerequisites above and the specific requirements below, applicants' academic records are normally required to meet, in standing and in subject matter, the requirements for admission to both this University and a recognized university in their own Province (the University of Alberta for residents of the Northwest Territories). However, applicants who have completed their secondary education outside the Province and whose families are permanently domiciled in British Columbia will be considered for admission on the same basis as graduates of British Columbia Secondary Schools.

The following specific requirements apply:

Alberta, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, the Northwest Territories — Grade XII graduation with a minimum average equivalent to the British Columbia C+ on all Grade XI and XII subjects, the subjects to include, as a minimum, Grade XI Mathematics and a Grade XI Science or Language.

Ontario - either a 65% average on full Grade XIII, completed within one year, or a 70% average in Grade XII on the 5-year Arts and Science programme.

Quebec - le diplôme d'études collégiales (D.E.C.) on completion of the two year academic course of studies at a collège d'enseignement général et professionnel (CEGEP). (In general, this grants placement in Second Year; applicants may be considered for admission to the First Year following completion of two semesters at a CEGEP.)

Prince Edward Island - at least a C average on the First Year's courses at the University of Prince Edward Island, or the equivalent. (Credit may be given for courses appropriate to the applicant's proposed programme at

the University of Victoria.)

Newfoundland - an average of at least 60%, with no failed subjects, in the First Year's courses at the Memorial University of Newfoundland.

#### (B) APPLICANTS FROM OTHER COUNTRIES:

If none of the qualifications below is appropriate to the country in which they received their secondary education, applicants may apply to the Director of Admission Services for consideration on an individual basis.

- (i) British General Certificate of Education (G.C.E.) an average grade of "C" with no subject below "D", for both Ordinary (O) and Advanced (A) Level courses, in five subjects including English, Mathematics, a second language, a laboratory science and one academic elective, of which at least three must be at the A level.
- (ii) British School Certificate as for the G.C.E. (i) above, with three passes at the Principal Level on the Higher School Certificate.
- (iii) University of Hong Kong Matriculation Certificate standing equivalent to (i) above.
- (iv) Certificate of Matriculation issued by a recognized university, indicating admissibility to that university.
- (v) High School Graduation and completion of at least one full year of study at an accredited college or university in the United States of America. Grade average of B or better. High School studies to include at least: 7 semesters of English, 6 semesters in a language other than English, 4 semesters laboratory science, 6 semesters mathematics. However, distinguished applicants who have completed high school graduation only may be admitted to the University. Such applicants must stand in the first 10% of the graduating class in their school.

#### 3. ADMISSION FROM COLLEGES AND OTHER UNIVERSITIES

Applicants who have failed their last year or who have an overall weak record at another institution will not normally be permitted to transfer to the University of Victoria, even though they may possess the admission requirements for secondary school graduates.

Those persons planning to undertake preliminary studies at another institution should verify in advance that the courses which they propose to take elsewhere may be acceptable for transfer credit in their subsequent

The University of Victoria Transfer Guide, which is available from the Admissions Office, lists those courses that are given in British Columbia colleges and accepted for transfer credit at the University.

Transfer credit granted on admission may or may not be applicable to the degree programme selected by the student, that is, it is subject to the same regulations as credit earned at the University (See Credit, page 14).

Transfer credit granted in a degree programme is limited and may not normally be applied to the final 30 units of the programme.

If a student's performance warrants a review of transfer credit granted on admission, the University reserves the right to require such a student to make up any deficiencies (without additional credit) before proceeding to studies at a higher level. These decisions would normally be taken at the Department level.

Applicants are considered in two groups:

- (i) Those applicants who were eligible for admission to the University under Regulation 1 or 2 above, before enrolling in another post-secondary institution, and who have maintained an average at least equivalent to University of Victoria's 2.0 in all college or university courses that are acceptable for transfer credit will apply as described in Paragraph 1, under Application for Admission, on page 8.
- (ii) Those applicants who either were not eligible for admission to the University on leaving secondary school or have not maintained the average specified in (i) above are invited to apply to the Director of Admission Services for individual consideration by the Senate Committee on Admission and Re-registration.

#### 4. ADMISSION OF MATURE APPLICANTS:

The University of Victoria is most willing to assist persons domiciled in British Columbia who are at least 21 years of age to complete their higher education even though they may not possess formal university entrance requirements.

The Senate Committee on Admission and Re-registration deals with applications from mature persons on an individual basis. Candidates applying for admission are asked to carry out the following steps:

(a) request an Application for Admission form by writing to the Director of Admission Services:

return the form, together with:

an official transcript of all academic work undertaken to date; a letter written by the applicant outlining his personal background and work experience; two letters of reference from employers or from persons who know the candidate well.

If possible, candidates should arrange an interview with the Director of Admission Services who will be pleased to give advice and assistance.

#### APPLICANTS WHOSE FIRST LANGUAGE IS NOT ENGLISH

The University requires that:

- Applicants for admission whose first language is not English, and who have resided in Canada or other English-speaking countries for less than three years prior to the beginning of the session applied for, must take the Test of English as a Foreign-Language (TOEFL) and submit scores by July 31. A score of not less than 550 on the Test of English as a Foreign Language is required for admission to the University.
- Students who are admitted to the University under (1.) above and who subsequently fail the English Qualifying Examination (see below) will be required to take Linguistics 099.
- Applicants whose first language is not English but who have resided in Canada or other English-speaking countries for more than three years are not required to take the Test of English as a Foreign Language. However, if at the time of admission they do not meet the University's English requirement they must thereupon write the English Qualifying Examination. If they fail the English Qualifying Examination, they may be required to take Linguistics 099 prior to taking English 111.
- 4. Students enrolled in Linguistics 099 must complete the course and, if successful in obtaining a pass, must then take the English Qualifying Examination again and follow regular University procedures from that point. If they fail Linguistics 099, they may be required to repeat the course, or may be required to withdraw from the University for insufficient command of the language of instruction.

Information concerning the Test of English as a Foreign Language, and the times and places at which it is administered, may be obtained by writing to Educational Testing Service, Princeton, N.J. 08540, U.S.A. Applications are available from the University's Counselling Centre.

# REGISTRATION

# COMPLETION OF REGISTRATION

In addition to completing the procedures mentioned above under the headings Application for Admission and Applicaton for Re-registration all students in the Winter Session are required to register in person at times announced by the Records Office. Each student, by his Notice of Admission or Authorization to Re-register will be informed of the time and place for registration in person. Sessional fees are payable at the time of registration.

All Notices of Admission and Authorizations to Re-register that are not used to register in the term and session to which they apply are automatic-

ally cancelled.

No registration will be valid until all required procedures have been completed and fees have been paid in accordance with the regulations given on page 15.

#### DECLARATION

Each student is required as part of his first application to furnish the information necessary for the University record, and to sign the following declaration:

I hereby accept and submit myself to the statutes, rules and regulations, and ordinances of the University of Victoria, and of the Faculty or School in which I am registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same.

#### **ENGLISH REQUIREMENT**

All students enroling in First Year, with the exception of those who have passed the B.C. Scholarship examination in English Composition, are required to write a qualifying examination to test their proficiency in expressing themselves in the English language. Students who fail the qualifying examination are required to complete English 111 with a grade of A

or English 111 and one of English 115, 121, 122.

This regulation also applies to students who enter the University from other post-secondary institutions and who do not possess the equivalent of English 111 with a grade of A or two of English 111, 115, 121, 122.

The Qualifying Examination may be written during the period June 14 to August 27 at the English Department in the Sedgewick Building, Monday through Friday, between the hours of 9:00 a.m. and 2:00 p.m. Alternatively, students may sit the examination on the Saturday before Registra-tion Week at the time and place specified in the instructions issued by the Records Office. The examination lasts two hours and will consist of one essay to be chosen from a wide list of subjects. It is designed to test the essay to be chosen from a wide list of student's proficiency in writing the English language. The results will be posted before registration. Students who fail the Qualifying Examination will register in English 111 and one of English 115, 121, 122. Students who fail the Qualifying Examination and whose first language is not English may be required to take Linguistics 099—see column to the left.

#### LATE REGISTRATION

The period for late registration in September is the first five days of classes.

#### REGISTRATION WITH UNSATISFACTORY STANDING

No student with unsatisfactory standing will be permitted to register without the permission of the faculty or school concerned.

#### REGISTRATION FOR BOTH TERMS IN WINTER SESSION

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including half-year courses beginning in January.

#### REGISTRATION FOR ONE TERM ONLY

If suitable half-year courses are available, students eligible to register in Third or Fourth Year or higher (those holding acceptable credit for 27 units or more) may:

- (a) Register during the regular September registration period for a programme of half-year courses to be taken in the First Term only. (See inside front cover for due dates for application.)
- (b) Register on the first day of classes in January for a programme of halfyear courses to be taken in the Second Term only (applications due by November 30).

#### REGISTRATION IN GRADUATE COURSES BY UNDERGRADUATES

Upon recommendation of the undergraduate department or faculty concerned, and with the consent of the Dean of Graduate Studies, undergraduate students in the Fourth or Fifth Year with a GPA of 6.0 or higher in the previous year's work, may register in up to 3 units of graduate courses in any one session.

#### CONCURRENT REGISTRATION AT ANOTHER INSTITUTION

Normally, a student may not be registered concurrently in courses offered at the University of Victoria and in university level courses offered at another institution. In exceptional circumstances, such registration may be permitted but only with the prior consent of the Dean of the faculty concerned or the Administrative Registrar.

#### CHANGES IN REGISTRATION

- (a) Students may add and drop courses during the first ten days of classes in the First Term and during the first five days in the Second Term upon submission of the appropriate change form to the Records Office.
- (b) Students may drop courses until the last day of classes in October in the First Term and the last day of classes in February in the Second Term, provided they submit appropriate withdrawal forms to the Records Office. Failure to notify the Records Office by the specified date will result in the student receiving a failing grade for the course.
- (c) A student who has a grade of E or F in a First Term course may re-register in the course if it is offered in the Second Term, provided that he will be registered in not more than 18 units. A student who has an E in a First Term course may take a Second Term course which lists the First Term course as prerequisite only with the permission of the department.

#### **AUDITING A COURSE**

An individual who is either a registered student or a member of the community may be permitted to audit up to 3 units of undergraduate courses in a session. Registration as an Auditor is subject to the following conditions:

- The individual must receive permission from the department or divi-(a) sion concerned.
- Admittance to the class is dependent upon the class size and other factors that the instructor and the department or division establish.
- The degree of participation in the course is at the discretion of the department or division.
- (d) Attendance shall grant no entitlement to either an academic record or transfer to credit standing at any time, including credit by course challenge, and shall not be considered as meeting admission, prerequisite or course requirements for any University credit programme.
- (e) Graduate courses are not open to persons who are not registered in the Faculty of Graduate Studies, except as provided by the regulations of that Faculty.
- (f) The fee, shown in the fee schedule in the Calendar, is payable at the time of registration.

NOTE: Registration of auditors takes place after the period for registration of students for credit.

#### STUDENT RESPONSIBILITY

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, each student is responsible for the completeness and accuracy of his registration. He must ensure that there is no discrepancy between the programme he is following and that recorded in the Records Office and that all changes, including those in address and telephone number, are reported promptly to the Records Office. A student may not take courses for which he has not registered, and may not drop courses without permission.

A letter mailed to a student's address as currently on record in the Records Office will be deemed to be adequate notification to the student

for all matters concerning the University.

#### MEDICAL REQUIREMENT

Students registering for the first time in the Winter Session are required to submit a health history. The necessary form is mailed to each student with his Notice of Admission, and must be completed and mailed to the University Health Service before registration can be completed. A medical examination is not compulsory except for resident students and those taking Physical Education courses. The medical examination is not provided by the University; it must be obtained at the student's own expense.

The University, through the Director of the University Health Service, may require a student to take a medical examination at any time during his attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

Students who are not residents of Canada are required to produce evi-

dence of adequate sickness and hospital insurance coverage before registration can be considered complete.

# ACADEMIC REGULATIONS

#### MINIMUM DEGREE REQUIREMENTS

Each candidate for a Bachelor's degree is required:

- (a) to present a passing grade in a qualifying examination in English (see page 11); or a grade of A in English 111, or a passing grade in English 111 and one of English 115, 121, 122; or transfer credit for the equivalent of two of English 111, 115, 121, 122;
- (b) to present credit in a minimum of 60 units of university level courses; at least 21 of these 60 units must be numbered at the 300 or 400 level, and at least 30 of the 60 units must normally be in courses that have been completed at the University;
- (c) to meet the specific degree and programme requirements prescribed by the undergraduate faculty in which the candidate is registered.

# **FINAL YEAR STUDIES**

Normally, all students must complete the final 15 units of courses at the University of Victoria. In exceptional circumstances, however, a student may take the final year of study at another university, subject to the regulations mentioned above, and to the prior consent of the Dean of the faculty concerned.

#### MAXIMUM COURSE LOAD

The maximum number of units a student is permitted to undertake in the Winter Session is 18; in the May through August period, 9.

#### MINIMUM COURSE LOAD AND ACCUMULATION OF CREDIT

Credit for courses may be accumulated by full-time or part-time studies in the Winter Session, or by studies in the Summer Session. In certain programmes, however, students are expected to commit themselves to studies in the Winter Session and to a specific number of units of courses; for example, Honours programmes in Arts and Science require 15 to 18 units in each Winter Session. Students are therefore referred to the Calendar entries of the individual faculties and departments for information on programmes that require a commitment to a specific number of units of courses in each Winter Session.

Students should note that to qualify for nearly all scholarships, bursaries and prizes administered by the University, the terms of the awards require enrolment in a minimum of 15 units in each Winter Session, and that present regulations governing Canada Student Loans require a minimum

enrolment of 9 units.

#### REPEATING COURSES

A required course in which a passing grade has not been obtained must be repeated or a permissible substitute taken in the next session attended. However, no course may be taken more than twice unless the course is a required course that is outside the student's main area(s) of study.

#### PROMOTION

Students may not proceed to courses in a higher year unless they take concurrently all courses required to clear deficiencies in the lower years, subject to the limitations mentioned above. Students may proceed only to courses for which they have successfully completed prerequisites to the satisfaction of the departments concerned.

#### ADVANCED PLACEMENT OR EXEMPTION WITHOUT UNIT CREDIT

In exceptional circumstances, undergraduate students may already have prepared themselves by independent study or other experience to omit a required course or courses or to undertake more advanced work than that ordinarily prescribed in the initial stages of a departmental programme. Students desiring advanced placement in a particular discipline may apply to the department giving courses in that discipline for such placement.

Advanced placement or exception from a required course carries no unit

#### UNDERGRADUATE COURSE CHALLENGE PROCEDURE

Registered students or those who have been formally admitted to the University may obtain credit by means of the course challenge procedure. This involves undertaking a special examination set by the department offering the course, at a time determined by the department. Not all departments offer the course challenge procedure and there are restrictions on its use. The restrictions are the following:

- Credit by course challenge is limited to a maximum of 15 units counting towards the student's degree.
- (b) No course whose equivalent appears on a student's secondary school, college or university transcript may be challenged.
- Once credit in a course at one level has been obtained, its prerequisite in the same subject may not be challenged.
- (d) Lower level courses in a student's native language may not be challenged (this applies to languages other than English).
- If the department permits the course challenge, the student's applica-tion will be signed by the department head or chairman indicating this and the student will be informed of the time that the course challenge will take place.

Application forms for course challenge may be obtained from the Records Office.

The course challenge fee is \$15.00 per unit. This fee is not refundable. The results of a course challenge, which are reported to the student and the Records Office in writing by the department, will be entered on the student's academic record and the grade will be included in the student's sessional grade point average.

#### CREDIT FOR COURSES PASSED IN A FAILED YEAR

(a) A student who intends to register in the final year of a degree programme may apply for credit in those courses which were passed within

- a failed year at the University of Victoria and for which no credit was granted, provided that the courses are applicable to the degree programme selected by the student. Application should be made when making application to register in the final year or when making application for graduation.
- (b) A student who intends to register in the final year of a degree programme may apply for credit in those courses which were passed within a failed year at another university or at a college and for which no credit was granted on admission, provided that the courses are applicable to the degree programme selected by the student. Appeals should be made in writing at the same time that application is made for registration in the final year of a degree programme, and should be addressed to the Senate Committee on Admission and Re-registration, c/o Records Office. The Committee will judge each case separately and on its own merits. In particular, it will consider the student's total record of achievement at the University of Victoria.

#### **PROBATION**

A student who has:

- (a) a marginal record upon admission, or
- (b) unsatisfactory progress in a previous session, or a poor record in a previous term or session

may be placed on probation by the Director of Admission Services or the Dean of his faculty, respectively. Any student whose grade point average falls below 2.0 will be automatically on probation in the next session

In each case the student will be notified by the Records Office that he will be on probation. An interview will be arranged through the Dean of his faculty, and the student may be requested to seek help at the Counselling Centre, the appropriate advising centre, or to take the Reading and Study Skills Workshop which is offered to all students by the Counselling Centre.

Depending upon the student's performance during the period of probation, the Dean may at any time either remove the student from probation for the remainder of the session or, acting on a decision of the Faculty, require that the student withdraw from the University. (See page 15: Withdrawal for Unsatisfactory Progress.)

#### ATTENDANCE AT LECTURES

A student is expected to attend all lectures in each course for which he is enrolled. Admission to a lecture or laboratory may be refused by the instructor for lateness, misconduct, inattention or neglect of duty. A student who neglects his academic work, including assignments, may be debarred from the Christmas or the final examinations in a course. (See column to the right: Term Assignments.)

#### ABSENCE CONSEQUENT ON ILLNESS

Students who are absent because of illness or disability should report to their instructors on return to classes.

#### GRADUATION

Senate grants degrees in November and May each year. Each candidate for a degree must make formal application for graduation when registering in the final Summer or Winter Session preceding his anticipated graduation. Graduands who have received permission to complete a course or courses elsewhere must apply for graduation not later than June 1 for fall graduation or December 1 for spring graduation. Special forms for this purpose are available from the Records Office. See regulation regarding

Graduating Class Fee, page 16.

The formal conferral of degrees takes place at a Convocation ceremony in May each year. Students who complete degree requirements at Summer Session graduate in the following November, when the Senate grants their degrees. However, such graduates are asked to choose either to receive their diplomas in January by mail and have their degrees conferred in absentia at the Convocation ceremony in May, or to attend the Convocation ceremony and have their degrees conferred in person. In either case, fall graduates become members of the Convocation of the University as soon as their degrees are granted by the Senate in November.

# **EVALUATION OF STUDENT ACHIEVEMENT**

The Senate has adopted a range of assessment techniques available to each department, faculty or school, for the purpose of evaluating student achievement. Each department, faculty or school selects the assessment techniques it wishes to use from amongst those approved by the Senate.

At the beginning of the course, the instructor shall discuss with the students the methods used by his department, faculty or school, in evaluat-

ing student achievement. The instructor shall then select the method or methods he will use from amongst those approved assessment techniques adopted by his department, faculty or school. Upon making his decision, he shall inform both the students and the department, faculty or school, in writing if possible, of the method or methods he will use.

#### **EXAMINATIONS**

Examinations in the winter session are held in December and April.

#### ILLNESS OR DOMESTIC AFFLICTION

Applications for special consideration because of illness or domestic affliction must be submitted in writing to the Records Office not later than two days after the close of the examination period. In all such cases a medical certificate or other substantiating document must be presented to the Records Office.

#### **DEFERRED EXAMINATIONS**

If a student falls ill during an examination or misses an examination because of illness or domestic affliction, this must be brought to the attention of the Records Office. A physician's certificate or other substantiating document must be submitted to the Records Office within two days of the close of the examinations. The Records Office will communicate with the instructor in regard to his assessment of the student's performance.

Please note: deferred examinations are granted only where final examinations are involved. Deferred examinations are normally held in August. If a deferred examination is not taken, the grade becomes N.

# LABORATORY WORK

In any course which includes laboratory work students will be required to make satisfactory standing in both parts of the course. Results in laboratory work will be announced by the department concerned prior to the final examinations, and students who have not obtained a grade of at least D will neither be permitted to write the examination nor to receive any credit for the course. If satisfactory standing is obtained in the laboratory work only and the course is repeated, exemption from the laboratory work may be granted with the consent of the department. The same rules may, at the discretion of the departments concerned, apply to non-science courses with laboratory work.

#### **TERM ASSIGNMENTS**

In any course which involves term assignments, students may be debarred from writing examinations if the required term work has not been completed to the satisfaction of the department concerned.

#### ENGLISH DEFICIENCY

Term essays and examination papers will be refused a passing grade if they are deficient in English; and, in this event, students will be required to pass a special examination in English to be set by the Department of English.

#### SENATE REGULATIONS FOR UNIVERSITY EXAMINATIONS

- 1. Candidates may not enter the examination room until invited to do so by the invigilator in charge.
- 2. Candidates are not permitted to enter the examination room after the expiration of one half hour, nor leave during the first half-hour of examination. Invigilators should send unusual cases to the Records Office at once.
- 3. Candidates shall not make use of any books or papers other than those provided by the invigilators or authorized by the instructor in charge of the course.
- 4. Candidates shall not communicate in any way with each other. Candidates are not permitted to ask questions of the invigilator, except in cases of supposed errors in the papers.
- 5. If a candidate believes there is an error in a paper, he should report it immediately to the invigilator, and, after the examination, report the error in writing to the Records Office. If he has other reason for complaint, he should communicate with that office within 24 hours.
- A candidate may not leave the examination room without first delivering his examination booklets to the invigilator.
- 7. Candidates are advised not to write extraneous material in examination booklets.

- 8. Candidates who wish to speak to the invigilator should raise their hands or rise in their places.
- 9. Candidates may be called upon by the invigilator to produce identification papers bearing a photograph to prove their identity.
- 10. Candidates leaving or entering examination rooms should do so quietly in order not to disturb others. Having left the examination room, candidates are asked not to gather in adjacent corridors, lest they disturb candidates who are still writing.
- 11. Smoking is not permitted.
- 12. Candidates who fall ill during an examination should report at once to the invigilator.
- 13. Candidates who fall ill or who suffer domestic affliction before an examination should report the circumstances immediately to the Records Office.
- 14. In case of extreme misconduct, invigilators are empowered to expel candidates from an examination room. Under such cirmustances, candidates may be required to withdraw from the University following an investigation of circumstances surrounding the misconduct.

#### **EXAMINATION RESULTS**

Instructors are permitted to release final grades to students in their classes who request them as soon as the grades have been forwarded by the department to the Records Office, on the understanding that grades are subject to final approval by the Senate in May. Statements of final grades will be mailed to students in the graduating class and to other students about the end of May, following granting of authority by the Senate to release grades.

First term results for full-year courses are released by instructors, not by the Records Office. Where courses are final at Christmas, instructors are authorized to release grades tentatively on the understanding that grades

are subject to final approval by the Senate in May.

Students may not have access to final examination papers without the permission of the department or faculty concerned and the Records Office.

#### REVIEW OF AN ASSIGNED GRADE

Reviews, where permitted by the faculty concerned, are governed by the following regulations:

- 1. Any request for a review of an assigned grade, other than for a supplemental examination (for which a request for a review will not be granted) must reach the Records Office within two weeks after the announcement of final grades and must be accompanied by a fee of \$7.50 for each course concerned, which will be refunded only if the
- 2. When applying for a review, the applicant must state clearly in writing why he believes his course deserves a grade higher than it received pleas on compassionate grounds should not form part of the appeal. If the basis of an appeal depends, in part, on term work, any essays or assignments that have been returned to the student should be submitted with the letter of appeal. Prospective applicants should note that, if any examination paper is involved, the paper is read at least a second time before a grade of E or F is recorded. For that reason, an applicant who is eligible for a supplemental examination should prepare for the examination since a change in grade is unlikely and since the result of the review may not be available before the time of the supplemental
- 3. Reviews will not be permitted in more than 6 units in a full programme in one Winter Session, and in 3 units in a partial programme of 9 units or less or in the work of one Summer Session.
- 4. During the session, if a student feels that a grade awarded for term work is unfair, he should discuss the matter informally with the instructor concerned. Failing that, he should appeal directly to the Department Head or Chairman or to the Dean of the Faculty.
- Students are advised that there can be no appeal against that part of a final grade which is based on oral examination or class participation.

## **CREDIT**

Successful completion of a credit course entitles the student to the recording of such credit on his academic record. The application of such credit to a degree or diploma programme, however, is subject to the regulations governing the requirements of the programme. In the case of a course for which credit has been received and which is repeated, the units will be shown on the student's record in each instance but will count only once toward the degree or diploma.

#### **GRADING SYSTEM**

	Grade	Grade Point Value	
<b>Passing Grades</b>			
m-12	A+	9	7
	A A—	8	First Class
	B+ B B-	6 5 4	Second Class
	C+ C D	3 2 1	Pass
	* COM	N/A	Complete (pass)
Failing Grades			
	E	0	Conditional supplemental
	F	0	No supplemental
Temporary Grades	N	0	Did not write examination or otherwise complete course requirements by the end of the term/ session; no supplemental
comporary ordines	## INC	NT /A	Ilate
	** INC	N/A	Incomplete
	*** DEF	N/A	Deferred examination granted

- \* COM used only for 0 unit courses and those Winter Session credit courses designated by the Senate. Such courses are identified in the course listing.
- \*\* INC used for those Winter Session credit courses designated by the Senate, to be replaced by a final grade by June 1 (except for Education 799, by August 1). Such courses are identified in the course listing. Also used for some graduate courses as explained in the entry for the Faculty of Graduate Studies.
- \*\*\* DEF used only for courses in which a deferred examination has been granted because of illness or domestic affliction. (See page 13.)

#### SESSIONAL GRADE POINT AVERAGE

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored.

#### MINIMUM SESSIONAL GRADE POINT AVERAGE

Undergraduates who fail to obtain a sessional grade point average of at least 2.0 will be placed on academic probation for the next session attended.

A student who is on academic probation and whose sessional grade point average falls below 2.0 will be required to withdraw, normally for one academic year.

A student who is required to withdraw a second time will not be permitted to register for credit courses at the University for at least five years.

#### STANDING AT GRADUATION

The graduating average of a student in an undergraduate faculty or school shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken at this University and accepted for credit in a degree programme of the faculty or school concerned. If the total unit value of all such courses does not exceed 30, all such courses will be included in the average. If the total unit value exceeds 30, the average will be taken on a maximum of 30 units of courses, chosen so as to give the highest average but always including courses specified for the degree programme, and where necessary, the appropriate fraction of a course.

Students whose graduating averages are 3.5 or higher will be placed in one of the following classes on the basis of the graduating average, subject to any regulation of the individual faculties, departments and schools with respect to standing at graduation:

First Class, an average of 6.5 or higher;

Second Class, an average between 3.5 and 6.49.

The above does not apply to students who are granted permission to undertake their Fourth Year at another university (see page 12). The classes of degrees to be awarded to such students shall be determined by the Dean of the Faculty in consultation with appropriate departments.

Students must have standing at graduation of at least 2.0 in order to graduate. (This takes effect after Fall Graduation 1976.)

#### WITHDRAWAL

Any student who after registration decides to withdraw from the University must notify the Records Office in writing. It is recommended that such students first visit the Director of the Counselling Centre, or the Coordinator of Academic Advising (Education students), and then go to the Records Office. Students who are prevented by circumstances from with-drawing in person must do so by letter addressed to the Records Office. Students will be required to obtain clearance from the University, to the satisfaction of the Records Office, before being granted honorable dismissal or recommended, where applicable, for refund of fees. See page 11: Changes in Registration.

#### SUSPENSION OR REQUIRED WITHDRAWAL

A student may be suspended or may be required to withdraw from the University at any time for unsatisfactory conduct or for failure to abide by regulations.

#### WITHDRAWAL FOR UNSATISFACTORY PROGRESS **DURING THE SESSION**

Any undergraduate student who has been placed on probation and whose progress is deemed unsatisfactory, may, upon the decision of the faculty and on notification by the Records Office, be required to withdraw from the University for the remainder of the session. A student so required to withdraw may appeal to the Senate for a review of his case by lodging a written appeal with the Secretary of Senate.

#### UNDERGRADUATE SUPPLEMENTAL EXAMINATIONS

- 1. (a) For all faculties and schools except Law:
  - (i) In the Winter Session no candidate will be granted supplementals in more than 3 units. A candidate will be granted a supplemental in a subject which he has taken during the session provided (i) he has written the final examination and has obtained a final grade of E, and (ii) he has obtained (as a result of the final examinations) at least 12 units of credit in that session. A grade of E confers only conditional supplemental standing and is not a guarantee of supplemental eligibility. Students in the Faculty of Education taking a required 18 unit year may write up to 6 units of supplementals. A student who obtains a grade of F in a given subject may not write a supplemental examination in that subject.
  - (ii) No supplementals will be granted to Summer Session and part-time students.
  - (b) For the Faculty of Law: See page 155.
- 2. If a grade of E is obtained in a December final, the student has the option of repeating the first term course in the second term if it is offered, or, if eligible, writing a supplemental examination in August.
- 3. A student who is a candidate for a degree to be awarded at the end of the Winter Session in which he is in attendance, will be granted supplemental examinations in more than 3 units of courses, at the discretion of the Dean of the Faculty concerned and the Administrative Registrar, provided that the student has written the final examination and has obtained a grade of E in each course for which a supplemental examination is requested.
- 4. If a supplemental granted in a course is passed with a grade of at least D, credit will be given for the course. In the computation of the overall average in the work of a session or for a degree, the grade in a supplemental, if passed, will be considered as D.\*
- 5. Similarly, the overall average will not be changed if a subject already passed is written for higher standing.\*
- 6. In all but the Final Year a candidate who has been granted a supplemental may write it only once. If he fails, he must repeat the course or take a permissible substitute. In the Final Year he may write it twice.
- 7. Supplemental examinations, covering the work of both the first and second terms, will be held in August.
- Applications for supplemental examinations, accompanied by the necessary fees, must reach the Records Office by July 1.
- 9. If a student, because of exceptional circumstances, is permitted to postpone a supplemental beyond the first regular supplemental examination period, he will be responsible for the content of the course as currently offered. If the course is not offered or has been discontinued, the supplemental privilege may be cancelled.

Supplemental examinations may be written at the following B.C. centres: Cranbrook, Dawson Creek, Kamloops, Kitimat, Ocean Falls, Penticton, Powell River, Prince George, Prince Rupert, Trail, Vancouver; and at

\*This statement does not apply to the Faculty of Law: see page 155.

Whitehorse, Y.T. Other centres ouside of British Columbia are restricted to universities or their affiliated colleges.

The fee for each supplemental examination written at the University is \$10.00; at a regular outside centre, \$15.00. Conditions governing refunds appear on page 18: Other Fees and Charges.

#### TRANSCRIPT OF ACADEMIC RECORD

On request of the student, a certified transcript of a student's academic record will be mailed by the Records Office direct to the institution or agency indicated in the request. Each transcript must include the student's complete record at the University. Since standing is determined by the results of all final grades in each session, transcripts are not available for the first term grades until after the end of the session.

Students' records are confidential. Transcripts are issued only at the

request of students or appropriate agencies or officials.

No certified transcript will be issued to or for a student who has not made arrangements satisfactory to the Accounting Office to meet any outstanding indebtedness.

Granted Honourable Dismissal indicates that the student is in no disciplinary difficulty at the time the transcript is issued; the term has no reference to academic status.

Application for a transcript should be made at least one week before the

document is required.

Fees for transcripts of academic record: one copy free of charge at the completion of each session attended; three copies free of charge following graduation; addition copies supplied at the rate of 2 copies for \$1.00. Free copies may not be accumulated.

# FEES

#### GENERAL

The University reserves the right to change fees without notice. Fees are not transferable from one session or term to a subsequent session

While the University may issue fee bills from time to time, it is the responsibility of the student to calculate his fees in accordance with the following regulations and to ensure payment by the prescribed dates. Failure to receive a fee bill does not relieve the student of this responsibility.

Students registering in the Summer Session should consult the Calendar

Supplement for Summer Session which is published separately.

Transcripts will not be issued, and re-admission to the University may be denied, to those who have unpaid accounts.

#### **TUITION FEES**

#### UNDERGRADUATE PROGRAMMES:

Winter Session:

Faculty of Law \$506.00

Other Faculties \$30.00 per unit (see "0" Unit Courses, below),

with a maximum total fee of \$428.00 for the

session

Summer Session

and studies in May and June:

\$100.00 per 3 unit course (see "0" Unit Courses,

below).

Internship Programme

(Education): \$428.00

#### **GRADUATE PROGRAMMES:**

Full-time Students

	Master's degree	Doctor's degree
First year	\$450.00	\$450.00
Second year	\$450.00	\$450.00
Third year	\$ 30.00	\$450.00
Subsequent years	\$ 30.00	\$ 30.00

Master's candidates completing all degree requirements in the first third of the second year will be exempt two-thirds of the second year fees; Master's candidates completing in the second third of the second year will

be exempt one-third of the second year fees.

Part-time students, and full-time students who change from full-time status in their second year, are assessed fees at \$60.00 per unit up to a maximum of \$450.00 per annum, but must pay \$900.00 for a Master's degree or \$1,350.00 for a Doctor's degree before graduation.

Special students and qualifying students are assessed fees at \$60.00 per

unit up to a maximum of \$450.00 per annum. Fees paid in these cate-

gories are not applicable towards a subsequent degree programme.

Students taking a Doctor's degree after a Master's degree, both degrees taken at the University of Victoria, will pay a total of \$900.00 in tuition fees for the Doctor's degree in addition to the tuition fees paid for the Master's degree.

Master's candidates who are transferred to a Doctoral programme before completing the Master's degree may count at most \$450.00 in tuition fees paid as Master's candidates towards the tuition fee for a Doctor's degree.

Tuition fees cover all prescribed courses of study at the University of Victoria, direction and supervision of research, the use of laboratory and library facilities, and examinations. Tuition fees do not cover the cost of prescribed field trips, travel in connection with research, or the typing or binding of theses and dissertations.

#### "O" UNIT COURSES

Courses which have "0" unit value are assessed a fee unit value for the purpose of assessing fees. This value is shown in the course description.

#### **AUDITORS**

\$15.00 per unit; \$5.00 per unit for individuals 65 years of age or over.

# STUDENT ORGANIZATIONS — FEES AUTHORIZED BY THE **BOARD OF GOVERNORS**

#### ALMA MATER SOCIETY FEE

The Alma Mater Society fee is required at the time of registration from all students registered in an undergraduate Faculty or programme in the Winter Session, as follows:

Students registering in the first term:

for 9 units or more

\$42.00

for less than 9 units

\$ 4.50 per unit

Students registering in the second term:

for 5 units or more

\$21.00

for less than 5 units

\$ 2.25 per unit

The above fees apply to all students registered for credit in Winter Session courses other than those courses which are taken off campus. The fees shall be assessed on the basis of the fee unit values of courses for which each student is registered as of the tenth day of classes in the first term and, for those students registering in the second term only, as of the fifth day of classes in the second term. Enquiries with respect to this fee should be directed to the Alma Mater Society.

#### STUDENT UNION FEE

The Student Union fee of \$2.00 is required at the time of registration from all undergraduate students registered in the Summer Session and in the Education Internship Programme. Enquiries with respect to this fee should be directed to the Alma Mater Society.

#### **GRADUATING CLASS FEE**

The Graduating Class fee of \$10.00 is required at the time of registration from all undergraduate students registered in the Winter Session who expect to complete their degree requirements and graduate in this academic year (see Graduation, page 13). This fee is for the support of Graduating Class activities. Applications for partial refund of this fee by students who are not eligible to graduate at the end of the session, and any other enquiries with respect to this fee, should be addressed to Graduating Class President, care of the Alma Mater Society.

#### GRADUATE STUDENTS' SOCIETY FEE

The Graduate Students' Society fee of \$15.00 is required once each year at the time of registration from all students registered in graduate programmes. Students who continue in master's and doctoral programmes beyond the second year will be assessed the Graduate Students' Society fee yearly until they cease to be registered students. Enquiries with respect to the fee should be directed to the Graduate Students' Society.

# OTHER SESSIONAL FEES — UNDERGRADUATE FACULTIES

#### APPLICATION FEE

An application fee of \$10.00 is to be paid at the time of application for admission to the Faculty of Law. This fee is not refundable and is not applicable to tuition fees.

## **EVALUATION FEE**

An evaluation fee of \$10.00 is required from applicants for undergraduate faculties other than the Faculty of Law whose academic records, in whole or in part, originate outside British Columbia. The fee must accompany the Application for Admission, or must be paid when evaluation of documents is requested prior to application being made. The fee is not refundable and is not applicable to tuition fees.

#### LATE REGISTRATION FEE

A late registration fee of \$20.00 will be charged to any student who completes registration procedures after the time appointed by the Administrative Registrar.

#### PEINSTATEMENT FEE

A reinstatement fee of \$25.00, additional to all other fees, must be paid by any student who wishes reinstatement in the same session after allowing his registration to become invalid. Reinstatement will be contingent upon the permission of the student's Dean and the Administrative Registrar.

#### OTHER SESSIONAL FEES — FACULTY OF GRADUATE STUDIES

#### APPLICATION FEE

An application fee of \$5.00 is to be paid at the time of application for admission. This fee is not refundable and is not applicable to tuition fees.

#### REINSTATEMENT FEES

A reinstatement fee of \$25.00, in addition to all other fees, must be paid by a student wishing reinstatement in the same session after having allowed his registration to become invalid by his failure to pay his outstanding fees, permission of the Dean of Graduate Studies and the Administrative Registrar. on the understanding that such reinstatement will be contingent upon the

A student who has allowed his registration in a graduate programme to lapse without permission, will be assessed a reinstatement fee of \$100.00 over and above any other applicable fees.

#### **PAYMENT OF FEES**

#### VALIDATION OF REGISTRATION

Registration is valid only if enrolment procedures are completed in keeping with regulations given on page 11 and if fees are paid in accordance with the regulations that follow. If a student fails to validate his registra-tion by payment of fees in accordance with these regulations he will not be entitled to attend classes or undertake examinations and must apply for reinstatement. Reinstatement in the same session will be contingent upon the permission of the student's Dean and the Administrative Registrar, and upon payment of the reinstatement fee in addition to all other outstanding

#### INSTALMENT PAYMENTS

Although certain tuition fees may be paid in instalments (see below), all fees are payable at the time of registration.

A minimum payment of \$50.00 or, where applicable, one-half of sessional A minimum payment of \$50.00 f, where applicable, offerhalm of sessional fulfion fees, whichever is the lesser, is required from all undergraduate students at the time of registration. This payment is part of the first fee instalment (see below) and is applied to tuition fees. Students who provide documentary evidence that their full first fee instalment will be paid directly to the University by a government department or other organization will be granted exemption from this prepayment requirement.

#### SCHEDULE OF PAYMENTS - STUDENTS WHO WITHDRAW OR DROP COURSES

Students who withdraw from the University or drop courses prior to the payment dates show below may still be required to pay full fees (see Refund of Fees). Applications for re-registration and for transcripts may not be accepted until required fees have been paid in full.

## SCHEDULE OF PAYMENTS - FIRST TERM

The schedule of minimum payments required from undergraduate students registering in the first term of the Winter Session (other than those registering in the Faculty of Law and the Education Internship Programme) is as follows:

At or prior to registration

\$50.00 (see Minimum Fee Payment above).

On or before October 15, 1976

\$30.00 per unit for courses which finish in the first term, plus \$15.00 per unit for courses taken in both terms, less the prepayment above.

All applicable student organization fees.

All late registration fees assessed.

On or before January 14, 1977

\$30.00 per unit for courses taken in the second term only, plus \$15.00 per unit for courses taken in both terms, subject to the maximum total tuition fee of \$428.00 for the session.

#### SCHEDULE OF PAYMENTS - SECOND TERM

The schedule of payments required from undergraduate students registering in the second term of the Winter Session is as follows:

At or prior to registration

\$50.00 (see Minimum Fee Payment,

page 16).

On or before January 14, 1977

\$30.00 per unit, less the prepayment

All applicable student organization

fees.

All late registration fees assessed.

#### CHANGE OF PROGRAMME

Students who, subsequent to the prescribed payment dates shown above, change their programmes so as to increase their fees for the current term, must pay such increases within two weeks of the change in their programmes.

#### ILLUSTRATION OF FEE PAYMENTS REQUIRED FOR AN UNDERGRADUATE PROGRAMME:

Course programme		First Term	Second Term	Total Sessional Fees
Courses which finish in the first term	4½ units	\$135.00		\$135.00
Courses taken in both terms	9 units	\$135.00	\$135.00	\$270.00
Courses taken in the second term only	3 units		\$ 90.00	\$ 90.00
Total	16½ units	\$270.00	\$225.00	\$495.00
Reduction in second term to adjust total sessional fees to a maximum of \$428.00			\$ 67.00	\$ 67.00
Total tuition fees		\$270.00	\$158.00	\$428.00
A.M.S. fee		\$ 37.00		\$ 37.00
Fee payments required		\$307.00	\$158.00	\$465.00

This example is for illustrative purposes only. The fee payments required from individual students may differ, and will depend upon their particular course programmes.

#### SCHEDULE OF PAYMENTS - FACULTY OF LAW

The schedule of payments required from students registering in the Faculty of Law is as follows:

At or prior to registration

\$50.00 (see Minimum Fee Payment,

page 16).

On or before October 15, 1976

\$253.00 less the prepayment above. All applicable student organization

fees.

All late registration fees assessed.

On or before January 14, 1977

\$253.00

#### SCHEDULE OF PAYMENTS — EDUCATION INTERNSHIP PROGRAMME

The schedule of payments required from students registering in the Education Internship Programme is as follows:

At registration

\$323.00

\$2.00 Student Union fee

On or before April 15, 1977

\$105.00

\$2.00 Student Union fee

#### SCHEDULE OF PAYMENTS — GRADUATE STUDENTS

The schedule of payments required from students registering in graduate programmes will be issued at the time of registration. All other fee regulations apply to these programmes.

#### LATE PAYMENT FEE

A late payment fee, additional to all other fees, will be charged when fees are not received in the Accounting Office on or before the due dates specified above. This fee is 10% of the unpaid balance; minimum \$5.00, maximum \$20.00. Students who wish to appeal against this fee must do so in writing to the Late Payment Fee Appeals Committee and such appeals must be received within fourteen days from the imposition of the fee. Appeals will not be considered unless the student's current fee instalment, including the late payment fee, has been paid in full.

#### METHOD OF PAYMENT

Fees should be paid, in person or by mail, to the Accounting Office. Cheques should be made payable to "University of Victoria". Those students who do not pay by certified cheque, and whose cheques are returned by their banks, will be subject to the late payment fee if their cheques are not redeemed by the prescribed payment dates.

Students who claim that their fees will be paid directly to the University by scholarship award, government department or other outside agency, must produce documentary evidence at the Accounting Office. When this is not done by the prescribed payment dates, late payment fees are applicable.

#### UNPAID ACCOUNTS - PRIOR SESSIONS

Payments received will be applied firstly to any unpaid accounts from prior sessions.

#### **REFUND OF FEES**

#### WITHDRAWAL

Undergraduate and M.P.A. students who withdraw from the University should notify the Records Office immediately in writing. Students registered in the Faculty of Law or the Faculty of Graduate Studies who wish permission to withdraw must notify their Dean. Otherwise, full fees will be assessed and applications for re-registration may not be accepted until accounts are settled in full.

#### WITHDRAWALS OR DROPS - UNDERGRADUATES

Undergraduate students who register in the first term and who withdraw from the University or drop courses will normally be charged tuition fees in accordance with the following schedule. Tuition fees paid in excess of these amounts will be refunded.

Tuition fees charged in event of withdrawal or course drop on or before:

September 17, 1976 — \$10.00 per course (maximum \$50.00)

September 24, 1976 — 40% of first term fees

— 60% " " October 1, 1976

**—** 80% " " October 8, 1976 January 7, 1977 — 100% " "

January 14, 1977 — 100% of first term fees, plus \$10.00 per course (maximum \$50.00)

January 21, 1977 - 100% of first term fees, plus 40% of second term fees.

January 28, 1977 — 100% of first term fees, plus 60% of second term fees

February 4, 1977 — 100% of first term fees, plus 80% of second term fees

after February 4, 1977 - 100% of sessional fees.

Undergraduate students who register in the second term and who withdraw from the University or drop courses will normally be charged tuition fees in accordance with the following schedule. Tuition fees paid in excess of these amounts will be refunded.

Tuition fees charged in event of withdrawal on or before:

January 14, 1977 — \$10.00 per course (maximum \$50.00)

January 21, 1977 — 40% of second term fees

January 28, 1977 — 60% " February 4, 1977 — 80% "

after February 4, 1977 — 100% "

#### WITHDRAWALS OR DROPS - GRADUATES

Graduate students who withdraw with permission by the end of the first week of classes in January will not be required to pay the second fee instalment in the Winter Session. Those who withdraw after that time must pay the second instalment, except in extenuating circumstances such as illness or domestic affliction.

#### REFUND OF AMS FEE

Alma Mater Society fees are not subject to adjustment as the result of changes in a student's programme. However, students who withdraw from the University prior to the date shown below may, upon surrendering their A.M.S. membership cards, apply to the Alma Mater Society (not to the University) for refunds of A.M.S. fees paid in the amounts shown:

Withdrawal from the

University on or before

Amount of Refund

October 15

Full A.M.S. fee paid

January 31

One-half A.M.S. fee paid, except where the student registered in the second term only, in which case the refund shall be the full A.M.S. fee paid.

No full or partial refunds of A.M.S. fees will be made to students who withdraw from the University after January 31.

#### SCHOLARSHIPS, FELLOWSHIPS, BURSARIES AND LOANS

#### PROCEEDS FROM AWARDS

Except where the donor directs otherwise, the proceeds of scholarships, fellowships and bursaries issued by or through the University will be applied against the total sessional fees. If the amount of the award or awards exceeds the unpaid total sessional fees, the excess balance will be paid to the student.

#### PROCEEDS FROM LOAN FUNDS

Students who require financial assistance (including that granted under the Canada Student Loan Plan) in order to pay sessional fees should apply to the appropriate agency in sufficient time to receive such assistance by the prescribed payment dates. Late payment fee regulations are applicable where this has not been done.

#### **ENDORSEMENT OF AWARD CHEQUES**

Certain scholarships and bursaries are paid by cheque drawn in favour of the student. If these cheques are not endorsed and applied against fees by the prescribed payment dates, the regulations covering late payment will apply.

#### ADVICE ON AWARDS AND FINANCIAL AID

Students seeking advice about scholarships, fellowships, prizes, bursaries and loans should direct their enquiries to the Financial Aid Office.

# **OTHER FEES AND CHARGES**

#### LABORATORY TICKET

Students registered in Chemistry courses are required to purchase a laboratory ticket for \$6.00. These tickets should be purchased at the Accounting Office before the commencement of classes.

# PARKING AND TRAFFIC FINES

A fine will be imposed for infraction of University parking and traffic regulations.

#### LIBRARY FINES

Fines will be imposed for infraction of Library regulations in amounts determined by the University Librarian.

#### BOARD AND LODGING

Information concerning board and lodging in the University residences is given on page 20.

#### SUPPLEMENTAL EXAMINATIONS

Regular supplemental examination, per paper	\$10.00
Supplemental examination at regular centres, per paper	15.00
Supplemental examination at centres outside of British Columbia	15.00

Supplemental examination fees must be paid when application for examination is made and not later than July 1. In the event that a candidate does not appear for an examination, a refund will be authorized only if, within 10 days after the scheduled examination, the candidate submits to the Administrative Registrar an adequate explanation for failure to write the examination. If the refund is made, it will be \$5.00.

Full refunds will be granted only to those students who cancel their applications by July 15.

#### REVIEW OF GRADE

#### **COURSE CHALLENGE**

Fee for course challenge payable at the time This fee is not refundable.

#### **TRANSCRIPTS**

Fee for transcripts of academic record: one copy free of charge at the completion of each year; three copies free of charge following graduation; additional copies supplied at the rate of 2 copies for \$1.00. Free copies may not be accumulated.

#### PARKING FEES

All motor vehicles, driven or parked on campus between 7:00 a.m. and 6:00 p.m. Monday through Friday and between 7:00 a.m. and 12:00 noon Saturday, by members of Faculty or Staff, by Students, and by persons whose normal place of employment is on campus, must be registered with

Parking permits and regulations are obtainable at the Traffic and Security

# ACADEMIC SERVICES

#### LIBRARY

The Library of the University of Victoria contains over 700,000 volumes, over one million items in microform, and more than 15,000 records and tapes. The Curriculum Laboratory has a specialized collection of over 30,000 volumes and other materials to support student teaching requirements in the Faculty of Education. The University Map Collection, in the Cornett Building, houses over 60,000 maps and 50,000 aerial photographs.

With the exception of its Special Collections of rare books and manuscripts, all resources of the McPherson Library are housed in open stacks, to which there is full public access. Special facilities are provided for the use of audio-visual and microform materials. Experienced staff are available and willing to assist students and others to take fullest advantage of the Library's resources, including individual or group instruction in use of a research library.

Regulations regarding loan policies and information concerning hours of service are posted prominently in the Library or may be obtained at the

Information or Circulation Desks.

#### ACADEMIC ADVISING

Each of the undergraduate Faculties provides an academic advising service for students contemplating enrolment in programmes offered at the undergraduate level. The Advising Centre of the Faculty of Arts and Science is located in room 323 in the MacLaurin Building. The Advising Centre of the Faculty of Education is located in room 250, MacLaurin Building. Students in the Faculty of Fine Arts are referred to the Office of the Dean of the Faculty, room 192, MacLaurin Building, for information regarding academic advice.

#### **COUNSELLING CENTRE**

#### A STUDENT SERVICE

The purpose of the Counselling Centre is to assist students in gaining the maximum education from the time they spend at the University. This may involve helping them to solve learning, vocational or personal problems and to integrate new skills and experiences into their lives so they will have more competence and self confidence.

#### COUNSELLING FOR STUDY AND LEARNING PROBLEMS

It is normal for students to have study and learning problems from time to time - problems such as poor retention, inability to concentrate, difficulties with assignments, persistence, organization, expression, reading, writing exams, and so on. If these get too big or continue for too long, the student's educational career can be threatened. The Counselling Centre offers a Reading and Study Skills course, as well as individual counselling and assistance with these problems and invites students to come early rather than late.

Reading and Study Skills Course - This short, non-credit course is offered at the beginning of each term. It is designed to help students develop better techniques for reading, for listening, for organizing and learning material, and for writing essays and exams.

Transition Course - A concentrated version of the Reading and Study Skills programme, is offered in the two weeks prior to registration in the fall. It is designed to help newcomers prepare for university kind of learning, including the use of library resources. Professional counsellors provide an open-minded and confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. Some of the personal problems which students bring to the Counselling Centre are shyness and lack of self-confidence, difficulty in communicating with and relating to others, inability to speak up and express themselves, family conflicts, loneliness, depression, loss of interest and feeling "fed up", questions about aptitudes and intelligence, disappointment with the University and professors, difficulty in making decisions, anxieties connected with writing examinations, presenting seminars, practice teaching, etc., and heterosexual and homosexual concerns. Students are helped to sort out their problems, to develop self-awareness, to overcome problems by using new coping strategies, and to evolve a personally satisfying philosophy of life.

#### **EDUCATIONAL-VOCATIONAL COUNSELLING**

Many individuals are interested in getting into an educational programme which provides for maximum achievement and satisfaction, and which opens doors to a variety of vocational and job opportunities. Counsellors utilize interest tests and other assessment techniques to help students understand their strengths and weaknesses for learning and achievement and for different vocations. Educational-vocational counselling today is person-centred, i.e. focused on helping the individual to discover his unique needs and potential, to find which types of occupations will meet his personal and professional needs and to develop learning, adjustment, and exploratory strategies that will enable him to adapt to a rapidly changing world.

#### GROUP PROGRAMMES

In addition to problem solving, and other remedial counselling, the Counselling Centre is developing and offering a number of group programmes. Students may arrange to join a particular group by contacting the Counselling Centre.

Anxiety Management — In this programme students are trained to deal with anxiety, stress, and worries (e.g. public speaking anxiety, examination anxiety, and phobias) so that these cause less discomfort and disruption of studies and their lives. The programme involves training in relaxation, desensitization of anxieties, and mental self-control.

Assertion Training — This programme is for those who have difficulty standing up for their rights, expressing their views and feelings, and distinguishing between assertion and aggression.

Communication and Personal Relations Programme — This is a group programme in which the focus is on the development of self-awareness, sensitivity to others, communication skills, and emotional expression.

Development of Self-Confidence — This is a group programme for students who wish to overcome shyness, learn to express themselves directly and freely, and to develop self-confidence.

Mature Students — In this group, students who have been away from formal education for some time have an opportunity to share and examine areas of mutual concern. The emphasis is on practical problem solving and the development of more effective coping strategies, in a supportive group atmosphere.

Sexual Attitudes and Awareness — This group programme is for men and women who are interested in exploring values, attitudes and conduct related to sexuality.

#### ADMISSIONS TESTING

The Counselling Centre is authorized to administer the Scholastic Ability Test and the Achievement Test of the College Entrance Examination Board, the Graduate Record Examination, the Miller Analogies Test, the Law School Admission Test, the Dental Aptitude Test Programmed College Admission Test, and the Test of English as a Foreign Language

College Admission Test, and the Test of English as a Foreign Language.

The services of the Counselling Centre are available to all students at the
University of Victoria. For further information, students should telephone,
write, or come to the Counselling Centre, located in the Clearihue Building
in the centre of the campus.

#### SPECIAL COURSE IN ENGLISH AS A SECOND LANGUAGE

The Department of Linguistics offers a non-credit course in English for students whose native language is not English. For details see *Linguistics* 099 on page 76 of the Calendar.

#### UNIVERSITY BOOKSTORE

The Bookstore, located in the Campus Services Building, is owned by the University and, in keeping with University policy, operates on a break-even basis.

All required and recommended textbooks are stocked by the Bookstore according to faculty requests.

In addition, the general booksection contains 15,000 titles in paper-back and hardcover editions to provide background reading, reference material for essays and up to date reading of interest. Special orders may be placed for any book currently in print.

Returns are accepted only with a receipt and within 10 days of purchase. At the beginning of the first term the return deadline for textbooks is

extended to a maximum of 8 weeks, until October 31.

Between April 15 and September 1, the Bookstore buys used textbooks at half the retail price according to a "want list" prepared from faculty requisitions.

The Bookstore Policy Advisory Committee, composed of faculty and student members, will be interested in any comments regarding the store.

#### **CAMPUS SHOP**

The Campus Shop, located opposite the Bookstore in the Campus Services Building is operated under Bookstore management.

It offers school and art supplies, gym strip, lab coats, crested ware, drugstore and gift items, cosmetics, greeting cards, stationery, games, hosiery, and sporting goods. The Campus shop also provides the services of a Sub Post Office.

#### COMPUTING FACILITIES AT THE UNIVERSITY OF VICTORIA

The University of Victoria offers an extensive range of computing services for students and faculty members. These services are centred around an IBM System/370 Model 145 computer located in the Clearihue Building. This main computing facility consists of the following equipment —

System/370 Model 145 CPU, 768K main storage

- 7 Disk drives, 806 thousand characters per second transfer rate, 500 million characters of on-line storage
- 4 Magnetic tape drives, 160 thousand characters per second transfer rate

Printer, 1100 lines per minute

Card reader, 1000 cards per minute

Card punch, 300 cards per minute

Communications controller, for use with time-sharing terminals

Drum Plotter

Paper tape to Magnetic tape converter

Optical mark scoring reader, for scoring multiple choice examinations

Keypunches, card interpreter, sorter, and reproducing punch machines available for general use.

The high speed terminal facility, designed primarily to offer fast computing service to students, consists of a card reader (1000 cards per minute) and line printer (1100 lines per minute). Adjacent to the high speed terminal facility are large keypunch and study areas available for general student use.

Low speed terminals are available in various locations on campus. These terminals are utilized in support of teaching and research activities primarily in Anthropology, Education, Mathematics, Psychology and Sociology.

The Computing Centre operates regularly every day of the week in order to enable students, faculty, and staff to have access to these services whenever required. Undergraduate and graduate students use the computer to complete assignments in many different courses. Research users include faculty members from nearly all academic departments at the University. New applications in computing are continuously being developed for teaching and research purposes, and the major objective of the Computing Centre is to adequately support the computing requirements of academic programmes. Also, for many years, computing services have been provided to the community at large with the emphasis being placed on scientific and educational applications.

In addition, the Computing Centre also supports the information handling requirements of the McPherson Library, Accounting Office, and the Records Office. These and other administrative departments make regular use of Computing Services for Library administration, circulation controls, payrells, and student records.

payroll, budgets, accounts payable, and student records.

Students in all disciplines are encouraged to learn and use the computing system within the first or second year of studies, if possible. Credit and non-credit courses are available for students and consultative assistance is available from the staff of the Computing Centre.

Students who are interested in a computing career may be eligible for further training by summer employment or part-time employment in the Computing Centre during the winter session. Some additional opportunities exist from time to time for employment with faculty members as research assistants.

# STUDENT SERVICES

# UNIVERSITY ACCOMMODATION

- 1. The University provides accommodation for 321 students in Craigdarroch Residences and 290 students in Landsdowne Residences.
- 2. Applications are available from the first of March each year from Housing Services, University of Victoria, Victoria, British Columbia. Because of the limited number of spaces available, students, both graduate and undergraduate, should not wait until they have received notice of eligibility to register to submit application forms for residence. Completed applications are numbered when received by Housing Services and room assignments are made on a first-come, first-served basis.
- 3. Assignment of rooms will commence in July for students who have returned their completed application forms together with an application deposit. All assignments are conditional upon the admission of the student to the University.
- 4. Students who have been assigned residence accommodation may occupy their rooms from the afternoon of the day before their registration. Meal passes become effective for dinner on the day before the first day of lectures. During registration week meals may be obtained on campus at current rates.
- 5. Students who will not arrive to occupy assigned accommodation by the first day of lectures must notify the Housing Services in writing before that date. Assignments may be cancelled where this is not done. Fees will be assessed from the beginning of the term.

#### OFF-CAMPUS ACCOMMODATION

A file of private homes where students may obtain full board and room, or light housekeeping accommodation, is maintained by Housing Services. While Housing Services makes every effort to maintain an up-to-date file on available homes, there is no guarantee that suitable accommodation will be found by the University for every student who applies. The cost of full board and room varies from about \$130 to \$160 a month. Students should ascertain whether they are being offered two or three meals a day, at the price quoted. For winter accommodation listed with the University, one month's notice in writing on or before the date that rent is due is required of the Landlord or Tenant. If accommodation without meals is offered, both Landlord and Tenant should be aware that the Landlord and Tenant Act applies.

#### **FOOD SERVICES**

The University operates a comprehensive food service facility in the Commons Building. Three Coffee Gardens on the main floor of the building provide meals and snacks to all members of the University Community. Residents' meals are served in the Cafeteria-Dining Room located on the second floor of the building.

Additional luncheon facilities are located in the Green Room on the

second floor of the Commons Building and in a coffee shop located in the

Campus Services Building.

Supplementary food service is provided by banks of vending machines in designated areas in the MacLaurin and Elliott Buildings, and by individual machines located throughout the campus.

#### UNIVERSITY HEALTH SERVICE

The University Health Service Building is located at the South East corner of Parking Lot No. 5.

A nurse is in attendance from 9:00 a.m. to 4:30 p.m. Monday through Friday. A doctor is in attendance from 10:00 a.m. to 4:30 p.m. Monday

through Friday.

In addition to the medical services required in direct support of various university activities and programmes, the University Health Service offers general medical treatment and counselling services for the convenience of students. While these services may be utilized by any student, they are offered primarily for the convenience of those students who do not have a regular physician in the Victoria area. Students are responsible for the cost of any such medical services provided, and students not having valid insurance coverage will be billed directly.

All students are advised to have medical insurance.

British Columbia students are encouraged to enrol in the Medical Services Plan of B.C. Students must be resident in British Columbia for one year before they are eligible for medical and hospital insurance coverage under the B.C. Plan.

Students from other Provinces are encouraged to continue their Provincial Medical coverage and are to be prepared to produce a medical insur-

ance identification number.

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete. Non-resident students can purchase a medical and hospital plan at the time of registration which provides acceptable sickness and hospital insurance with no deductibles. The rates for 1975-76 were \$110 for a single student and \$225 for a married student for twelve month coverage. These rates are subject to yearly change.

Details regarding medical and hospital insurance coverage are available from the University Health Service.

#### DAY CARE CENTRES

Two co-operative day care centres for those students with pre-school age children are located on the border of the campus. The centres are licensed to take children between the ages of two and four. Provincial government subsidies pay all or part of the fees of this non-profit centre which is staffed by trained personnel. Registration is limited. Application should be made at the centre at 2246 McCoy Road (477-8646).

#### CANADA MANPOWER CENTRE

The Canada Manpower Centre on campus is operated by the Federal Department of Manpower and Immigration, in co-operation with the University administration, faculty, and student government, as a service to

students.

The Centre itself is located in Building V (behind the SUB), operating Monday to Friday from 8:00 a.m. to 5:00 p.m. In addition, notices giving day-to-day information on employment opportunities, both permanent career and part-time, and on career developments are posted on Employment Notice Boards located in the Elliott (study wing), MacLaurin, Clearibue (main floor, old wing), Cunningham and Cornett Buildings, as well as in the Student Union Building. The various campus news publications are also utilized in advising students of specific events.

The following are the main functions carried out at the Centre:

- 1. Career Counselling
- 2. Career Employment Opportunities
- 3. Teacher Recruitment
- 4. Part-time School Year Employment Opportunities
- 5. Christmas Employment Opportunities
- 6. Summer Employment Opportunities

Graduating students looking for permanent career employment following the current academic year should register in September. On-campus career briefings and employment interviews generally take place from October through March. The procedure for teacher recruitment, usually carried out in March or April, is publicized well in advance at the Centre or on the campus employment notice boards.

Students seeking summer employment particularly in governmental Career-Oriented Programmes are advised to register by mid-January. Employer interviews can be scheduled any time during the period January to April. From May, summer employment opportunities are co-ordinated through a Greater Victoria Canada Manpower Centre for students (Specific details

to be announced at a later date.)

Those wishing part-time employment through the school year may register in September, as soon as time tables are firmly established, or maintain continuing contact with the Centre or campus boards.

Career briefings, as undertaken by related employers or association representatives, are ongoing throughout the academic year, with specific details posted as available.

Individual career counselling services are provided at the Canada Manpower Centre at any time.

# STUDENT AFFAIRS

The officer responsible for Student Affairs (appointment pending) serves as the liaison between the Alma Mater Society and the University.

## ALMA MATER SOCIETY

The Alma Mater Society is the legally incorporated society of undergraduate students of the University of Victoria. It is the recognized means of communication between students and the faculty, the administration, and the outside community. The governing body of the Alma Mater Society is the Representative Assembly, which consists of 22 members elected in February of each year.

The administrative officers direct the day-to-day activities of the Society. The President presides at all meetings, acts as chief spokesman of the Society, and also serves as liaison for the students both individual and corporate of the University. The Vice President handles many functions, including relations with other student groups, student representatives on University committees, and the day care centre. The Treasurer is responsible

for all financial affairs of the Society, and the Communications Director for intra-council communications and communications between all facets of the University. The Academic Affairs Chairman is responsible for representing undergraduate students on all academic matters within the university, and for organizing debates, symposiums, and the Society's speakers programme. The Activities Co-ordinator is responsible for the production of social activities such as dances, concerts, the pubs and cabarets. The Club's Director acts as the liaison between all A.M.S. clubs and the Society itself. The Publications Director is responsible for the Martlet, the telephone directory, and all other A.M.S. publications. The Athletics Chairman is the students voice in the University Athletics programme. The Campus Development Chairman is the representative of the Society in the University's decisions concerning buildings, grounds, and student housing, is responsible for the Student Union Building and represents the residence students to the Society. Finally the Chief Electoral Officer is responsible for all elections, referendums and their implementation. In addition there are 11 student representatives who are elected at large and who are responsible for voicing student opinion at Council meetings. All of these persons are willing to help any student with a problem he or she may have, and all may be contacted at the Student Union Building.

The A.M.S. levies a \$37 membership fee per full time student collected by the University for the Society. Of this amount, \$10 goes directly into the Student Union Building Expansion Fund (Dr. Ewing Memorial Fund), \$6.94 goes directly to the Athletics Directorate to support the athletic programmes on campus. The remaining \$16.06 goes towards the maintenance of the programmes, services and offering of the Society. Part-time students (for A.M.S. purposes, those carrying fewer than nine units) contribute a \$3 per unit A.M.S. fee which is allocated on the same basis as for full-time

students.

The programmes of the Society can generally be divided into four areas of concern — administrative, academic, service, and community. Under "administration" is placed the day-to-day operation of the Society, the operation of the SUB with its various facilities, the placing of Society representatives on committees both within the University and in the outside community. Those members of the Assembly concerned with academics actively investigate such matters as course and professor evaluation, examination procedure, tenure and promotion, university government, student awareness of the many facets of campus life. In the services area the Society acts to provide the student with many activities and facilities designed to increase and enhance his or her overall education, including clubs, publications, activities, athletics, charter travel, nursing and day care facilities, student housing, traffic and parking facilities. Finally, those University students interested in the problems in the community in which they live can, through the Alma Mater Society, organize groups concerned about problems, conditions, and activities within the greater society.

Any undergraduate student registered at the University of Victoria is eligible both to vote and to hold office in the Society. Many more people, however, are needed for the work of the Society than those elected, and most of the activities are carried out on a volunteer basis. If you have a problem of your own, if you have a problem of concern, if you have an idea, if you have a project — here is the place to come.

The door is always open.

President 1976-77: Mr. J. Alistair Palmer 1975-76: Mr. Clayton J. Shold 1974-75: Mr. Kirk Patterson 1973-74: Miss Linda M. Flavelle : Mr. David C. Clode (Acting: June-October) 1972-73: Mr. Russell W. E. Freethy 1971-72: Mr. Ian J. McKinnon 1970-71: Mr. Robert McDougall 1969-70: Mr. Norman Wright 1968-69: Mr. Frank Frketich 1967-68: Mr. David McLean 1966-67: Mr. Stephen Bigsby 1965-66: Mr. Paul Williamson 1964-65: Mrs. Olivia Barr 1963-64: Mr. Laurence E. Devlin

#### **GRADUATE STUDENTS' SOCIETY**

The Graduate Students' Society was officially recognized by the Senate of the University of Victoria in the fall of 1966, shortly after the establishment of the Faculty of Graduate Studies. Through the Executive Council of the Society, it represents the graduate students to the University and the community.

The eight members of the Executive Council of the Society are elected for one year terms by members of the Society. Four of the Executive members are elected in April and four in October of each year. Any graduate student registered at the University of Victoria, whether part time or full time, is eligible to vote in Society elections, to hold office in the Executive Council, and to represent the Society on University and Senate committees. The functions of this Society are: (a) to represent the Graduate Student Body in all matters pertaining to the welfare of it as a unit or any of the individuals comprising that Body, (b) to represent the academic, teaching and research assistants in communications with the Faculty and Administration, (c) to act as a liaison between the Graduate Student Body and the Faculty and Administration, (d) to promote intellectual, social and recreational activities among graduate students, (e) to provide a communicative link with the Alma Mater Society of the University and with graduate students from other universities, and (f) to assist incoming graduate students dents who are experiencing language or accommodation difficulties.

The Society is funded by a \$15.00 fee collected at Registration by the University for the Society. These funds are used to purchase library privileges for graduate students as well as to support the regular functions

of the Society.

Graduate students with ideas, projects, financial difficulties or other problems are urged to contact any member of the Executive for assistance. Executive members may be contacted through the Faculty of Graduate Studies or directly through addresses published in the Graduate Student Newsletter (the Newsletter is mailed directly to each member of the Society).

The Society administers a travel fund to assist graduate students wishing to attend professional meetings and conferences. For information, contact

the President of the Society.

Further information about the Society and its functions may be found in the Graduate Students' Handbook, a booklet published by the Society.

> President 1976-77: to be elected. 1975-76: Mr. Richard J. Thomas. 1974-75: Mrs. Anne D. Forester 1973-74: Mr. James B. London 1972-73: Mr. Eric S. Lee 1971-72: Mr. John N. Dorner 1970-71: Mr. Murray J. King 1969-70: Mr. William F. Hyslop 1968-69: Mr. Fred P. Dieken 1967-68: Mr. Michael G. Roberts 1966-67: Mr. Padraig Coughlan

#### **GENERAL CONDUCT**

The University authorities do not assume responsibilities which naturally rest with parents. This being so, it is policy to rely on the good sense of students for the preservation of good moral standards and for appropriate modes of behaviour and dress.

#### STATEMENT ON CHEATING

The standards and reputation of any university are the shared responsibility of its faculty and students. Within the obvious limits implicit in the difference between undergraduate work and specialized research, students at the University of Victoria are therefore expected to observe the same standards of scholarly integrity as their academic and professional counterparts. Clearly, a large part of the work done at the undergraduate level must involve the handling at second hand of ideas and material originally conceived or made accessible by others. Equally clearly, however, there is a difference between the use of the acknowledged restatement of such ideas and material after intelligent and critical assimilation and their unacknowledged, literal reproduction in the guise of new and original work. The latter amounts to cheating; and cheating, whether it takes the specific form of verbatim and unacknowledged copying from the writing of others, or whether it appears in other forms, such as the fraudulent manipulation of laboratory processes in order to achieve desired results, the use of commercially prepared essays in place of a student's own work or reference to unauthorized materials in examination circumstances, vitiates the purposes of a university education. While such practices may well stop short of "crime" in the sense that they may escape from the formal rigours of the law, they nevertheless constitute in all cases an offence against intellectual honesty. This renders forfeit not only the integrity of the individual involved but also the reputation of those who condone such lapses. Sanctions will therefore be enforced against cheating, ranging in severity as befits the individual case from simple reimposition of work, through forfeiture of credit for the particular assignment or the particular course involved, to possible expulsion from the University in the most extreme, deliberate or persistent cases. Offenses of this kind may, however, occur in a multitude of different ways and circumstances in different disciplines, and, especially at the undergraduate level, their fair treatment will frequently entail the consideration of contingent factors. These require the flexible exercise of equitable jurisdiction at all levels from the individual instructor upwards. The University as a whole does not therefore propound a single, comprehensive definition of cheating in all its shapes and forms beyond the general statement of position and principle herein advanced; nor does it specify an invariable code of pains and penalties. It does, however, reserve to its academic departments severally the power, under normal circumstances, to inculcate and enforce

proper standards of scholarly integrity by whatever internal procedures seem most appropriate to their respective disciplines, saving only that in matters involving student breaches of academic ethics, appeal may be made to the President if either party to the case so desires.

#### **AVENUES OF REDRESS**

In cases where students have problems involving individual faculty members and wish to seek redress, they may do so, without fear of consequence, through any of the following: the Counselling Centre, the Student-Faculty Liaison Committee of the Faculty of Arts and Science or of the Faculty of Education, the Department Head or Chairman, the Dean, or the President. Before using these channels, students are urged to discuss the matter with the individual faculty member concerned. In any event, should all appropriate recourses be to no avail, students have the right of final appeal to the Senate. Such appeals should be lodged, in writing, with the Secretary of Senate.

#### HAZING

The University prohibits hazing. The attention of students is called to this resolution of the Alma Mater Society:

The Student's Council shares the concern of the University over hazing during Frosh Week. We wish to point out that any form of hazing is forauring Prosn week. We wish to point out that any jorm of hazing is for-bidden by University regulation. With the advent of residences and the ensuing growth of the University, this form of conduct is becoming archaic and will no longer be tolerated. Any behaviour which exceeds the bounds of good taste and common sense will result in disciplinary action by the Students' Council.

#### **UNAUTHORIZED STUDENT ACTIVITIES**

Any student who (a) behaves in such a way that he causes or is likely to cause wrongful injury to any person or damage to the University or its property, or (b) violates the British Columbia liquor regulations within the precincts of the University, or (c) unlawfully enters a building on the campus, will be reported to the President for disciplinary action and may be suspended or expelled.

#### SERVICE TRAINING WHILE AT THE UNIVERSITY

#### MILITARY SERVICE SCHOLARSHIPS

The Department of National Defence sponsors programmes of university education and leadership training for selected young men and women who have the potential to become officers in the Canadian Armed Forces.

The programmes sponsored are the Regular Officer Training Plan (ROTP), Medical Officer Training Plan (MOTP), Dental Officer Training Plan (MOTP) ing Plan (DOTP) and Reserve Officer University Training Plan (ROUTP). Training given under these plans is divided into two parts: normal attendance at university throughout the academic year and military training each summer.

#### REGULAR OFFICER TRAINING PLAN:

This plan combines university subsidization with career training as an officer in the Regular Component of the Canadian Forces. Successful applicants are enrolled in the rank of Officer Cadet. They are required to maintain a good standing both academically and militarily while in the plan. All tuition and other essential fees are paid by the Department of National All tuition and other essential fees are paid by the Department of National Defence. In addition the Officer Cadet receives an annual grant of \$125.00 to purchase books and instruments, and a monthly pay of \$340.00 in the first year, \$355.00 in the second year, \$365.00 in the third year, and \$375.00 in the fourth and subsequent years of paid service under the plan. Free medical and dental care is provided. Twenty working days annual leave with full pay and allowances may be granted each year, either before or after the summer training period. On graduation the Officer Cadet is promoted to the commissioned rank of Lieutenant.

#### MEDICAL OFFICER TRAINING PLAN:

Sponsorship is provided under the Medical Officer Training Plan during the 2nd, 3rd and 4th year medicine and internship year. It consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and dental coverage, paid holidays and monthly pay of 2nd Lieutenant \$575.00 in academic years and \$750.00 in the internship year. Three years military service in Canadian Armed Forces starting with the rank of Captain is required upon obtaining a licence to practise medicine.

#### **DENTAL OFFICER TRAINING PLAN:**

Sponsorship is provided under the Dental Officer Training Plan during the 1st, 2nd, 3rd and 4th year dentistry. Subsidization consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and

dental coverage, paid holidays and monthly pay of \$340.00 in 1st year, \$575.00 in 2nd, 3rd and 4th year. Five years military service in the Canadian Armed Forces starting with the rank of Captain is required upon receiving a licence to practise dentistry.

#### RESERVE OFFICER UNIVERSITY TRAINING PLAN:

This plan provides an opportunity for selected undergraduates to prepare themselves for promotion to commissioned rank in the Reserve Component of the Canadian Forces. They are selected during the first months of the University year by the local Reserve Unit and are enrolled as Officer Cadets in the Primary Reserve. Cadets receive pay for training completed at local Reserve Units during the academic year (up to 15 days) and at training bases during the summer (up to 16 weeks).

Admission requirements:

An applicant must:

- a. be a Canadian citizen:
- b. be single and remain so until commissioned (ROTP only); MOTP, DOTP and ROUTP applicants may be married:
- c. if ROTP, be between the ages of 16 and 21 on the first of January of the year he commences first year studies at University; if MOTP and DOTP, be between the ages of 17 and 38; ROUTP from 17 to 23.

How To Apply: Interested students are requested to contact one of the following:

#### for ROTP, MOTP, DOTP

Commanding Officer Canadian Forces Recruiting Centre 614 Yates Street Victoria, B.C. V8W 1K9 Telephone: 388-3547

University Liaison Officer Royal Roads Military College Victoria, B.C. V0S 1B0 Telephone: 388-1442

#### for ROUTP (Militia)

Commanding Officer Canadian Militia District Headquarters Bay Street Armouries 715 Bay Street Victoria, B.C. V8P 1R1 Telephone: 388-3601

#### for ROUTP (Naval Reserve)

Commanding Officer H.M.C.S. Malahat **FMO** Victoria, B.C. VOS 1B0 Telephone: 388-2241

Dr. Michael L. Hadley Department of Germanic Languages and Literature University of Victoria

# ALUMNI ASSOCIATION

Graduates of the University of Victoria and members of Convocation automatically become members of the Alumni Association. People who attended Victoria College or Victoria Normal School are associate members. Interested people in the community may also become associate members.

The Association was originally a branch of the U.B.C. Alumni because Victoria College was part of U.B.C. When the College became a separate university, the Association became the Alumni Association of the University of Victoria and was incorporated under the Societies Act in 1965. Its purpose is to promote the well-being of the University.

The Association is governed by an Alumni Executive of 12 members plus representatives of the Faculty, AMS and Senate. The Association's policies and programmes are developed by the Executive and carried out by the

staff under the supervision of the Executive.

The Association's programmes, publications, University and community services are supported by an annual fund drive. The Association's operation

is supported by an annual grant from the University.

The Association helps the University by raising funds to support projects such as the Marine Sciences Service Vessel, the University Archives and the Library. The Association maintains a scholarship programme, a Student Loan Fund particularly for mature students, and a travel grant for graduate students. In November 1975, the Association committed itself to raising funds for a University Day Care Centre.

The Association keeps alumni informed about developments and activities on campus through the Quarterly magazine. It has arranged for alumni to have continued access to the Library, to many AMS activities, and to athletic events at reduced prices. The Association sponsors social events

during the year for alumni.

For students on campus, the Association organizes career discussions with members of the Alumni Association working in various occupational fields.

The Alumni Association office is always open to graduates and interested persons. Phone 477-6911, local 588 or 859. Programme Director: B. Paul Sutherland.

President 1975-76: Olivia R. Barr

1974-75: Olivia R. Barr 1973-74: Olivia R. Barr

1973 : R. H. Roy

1972-73: John D. Herbert

1971-72: John D. Herbert 1970-71: J. David T. Price

1969-70: J. David T. Price 1968-69: Donald S. Thomson

1967-68: Donald S. Thomson

1966-67: Hamish I. F. Simpson

1965-66: J. David N. Edgar

1964-65: J. David N. Edgar

1963-64: Robert St. G. Gray

# UNIVERSITY PUBLICATIONS

Besides this Calendar and the publications mentioned on the inside front cover, the following are designated as authorized University publications:

An international quarterly of life and letters edited by Professor Robin Skelton, B.A., M.A., F.R.S.L. Subscription: \$8.00 for one year; \$21.00 for three years.

A news tabloid published every two weeks under the direction of Maurice N. Cownden, Director, Department of University Relations, and edited by Bryan McGill. Circulated on campus free of charge.

# **FACULTY OF** ARTS AND SCIENCE

Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), Dean of the Faculty. John Woods, B.A., M.A. (Tor.), Ph.D. (Mich.), Associate Dean.

G. Grant McOrmond, C.D., M.A. (Sask.), Assistant Dean and Director of Academic Advising.

Marjorie L. Menhenett, B.A. (Wellesly Coll.), M.A. (Calif., Berkeley), Advising Assistant.

Linda M. Rhodes, B.A. (U. of Vic.), M.A. (Carleton), Advising Assistant. Johannes G. Seidel, Senior Academic Assistant, Language Laboratory.

#### **DEGREES OFFERED**

The degrees offered in this Faculty are Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.). Most departments offer programmes leading to an Honours degree.

#### **ACADEMIC ADVICE**

The Academic Advising Centre for the Faculty of Arts and Science is located in Room 323, MacLaurin Building. At any time, students may obtain information or advice on any programme or courses offered by this Faculty by visiting or writing the Director of Academic Advising. In addition, all Academic Departments have Departmental Advisors who can give detailed information regarding courses and programmes in the various disciplines. Students who may wish advice during the summer months from departmental advisers should write or telephone for an appointment.

Students entering the University from the Senior Secondary Schools of British Columbia will be asked to complete a Course Planning Form by the Admissions Office. All other students are strongly urged to complete a Programming Planning Form, preferably after consultation with an Academic Advisor. The student should then mail the form or bring it in person to the Advising Centre to be checked. A copy of the form will be sent, after checking, to the student; it will be of great assistance to the student at registration, particularly if advantage is to be taken of early registration

All students are required to complete a Record of Degree Programme, preferably not later than the second term of their third year. This will be checked by the Advising Centre; a copy will then be sent to the Records Office, where it will be used as a record for graduating purposes.

#### **GRADUATION STANDING**

The graduating average of a student graduating from the Faculty of Arts and Science shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken at this University and accepted for credit in a degree programme of the faculty or school concerned. If the total unit value of all such courses taken does not exceed 30, all such courses will be included in the average. If the total unit value exceeds 30, the average will be taken on a maximum of 30 units of courses, chosen so as to give the highest average but always including courses specified for the degree programme, and where necessary, the appropriate fraction of a course.

Students whose graduating averages are 3.5 or higher will be placed in one of the following classes on the basis of the graduating average, subject to any regulation of the individual departments with respect to determina-

tion of standing at graduation in an Honours programme:

First Class, an average of 6.5 or higher;

Second Class, an average between 3.5 and 6.49.

The above does not apply to students who are granted permission to undertake their Fourth Year at another university (see page 26 and Final Year Studies, page 12). The classes of degrees to be awarded to such students shall be determined by the Dean of the Faculty in consultation with appropriate departments.

#### **DEGREE REQUIREMENTS**

A student may proceed to the B.A. or B.Sc. degree in one of three programmes: Honours, Major, and General. The Honours programme requires specialization in a single field in the last two or three years and is intended for students of above average ability. Students who plan to undertake graduate work are strongly advised to follow an Honours programme. The Major programme requires a degree of specialization in one field in the last two years, and may permit the student to proceed to graduate study if sufficiently high standing is obtained, or to professional or business careers. The General programme may also lead to professional careers or graduate studies, depending upon the level of competence demonstrated therein; its distinctive characteristic, however, is the breadth of the education for which it provides. In most cases, by choosing courses carefully, students may postpone until the end of the Second Year the decision as to which programme to undertake. Students must consult departmental requirements and prerequisites. It is recommended that students entering the University from the Senior Secondary Schools discuss proposed programmes with personnel in the Admissions Office. All other students should consult with Departmental Advisors and/or the Director of Academic Advising for the Faculty of Arts and Science well in advance of registration.

Students who may wish to take a professional year in the Faculty of Education after obtaining the B.A. or B.Sc. degree are advised to consult the Advising Centre of the Faculty of Education before they embark on

studies in Third Year.

Students who may wish to transfer to another university to undertake further study, are advised to select either an introductory course in English or courses in another language to the 200 level or both amongst their

#### DEGREE REQUIREMENTS COMMON TO THE B.A. AND B.Sc. PROGRAMMES

Each of the Honours, Major and General programmes requires the completion of a minimum of 60 units of course work, including at least 21 units

of courses numbered at the 300 or 400 level.

Each undergraduate student seeking to qualify for a degree in the Faculty of Arts and Science is required: (a) either to pass a qualifying examination in the use of English, or to present a grade of A in English 111 or a passing grade in English 111 and one of English 115, 121, 122, or to present transfer credit for the equivalent of two of English 111, 115, 121, 22; and (b) to include, in the first 15 units presented for the degree not more than 9 units from any single department, and at least 3 units from each of two other departments; and (c) to include, in the next 15 units presented for the degree, not more than 12 units from any single department, and at least 3 units from another department.

#### HONOURS PROGRAMME

The number of units required for an Honours programme varies between 60 and 69 depending upon the requirements of the department concerned. Departmental requirements are set out on pages 26-107 and must be satisfied along with general University regulations on pages 12-15 and the general requirements for completion of the first 30 units as specified above.

Unless special permission is given by the Dean to the contrary, a student must complete the requirements for an Honours programme in four academic years. With the joint approval of the departments concerned, a student may be permitted to fulfill requirements for an Honours programme in two fields; however, such a programme may require an extra year of

A student planning to proceed in an Honours programme must consult the Chairman or Head of the department concerned, or his nominee, as early as possible in his academic career; and in any case must obtain the consent of the department concerned. This consent will normally be given only if (a) the department offers an Honours programme; (b) the student has fulfilled the requirements of the first two years, and has at least Second Class standing (a G.P.A. of 3.50) in the work of the Second Year and in the field of specialization; and (c) the student has completed all prerequisite courses. He may not continue in an Honours programme after the Third Year without the consent of the department concerned. If, in the opinion of the department, his work at any time is not of Honours standard, a student may be permitted to transfer to the Major or General programme.

A candidate for Honours may be required to present a graduating essay, to pursue a programme of directed studies, or to participate in an Honours seminar. The final date for submitting graduating essays or research reports to the departments in the second term is left to the discretion of the depart-

ment concerned.

A candidate for Honours may be required at the end of his final year to

take a comprehensive examination — oral, written, or both.

Honours are of two classes: First and Second. A student who passes all his courses but fails to obtain a Second Class standing (a G.P.A. of 3.50) in the work of his Third and Fourth Years may, upon recommendation of the department, be granted appropriate standing in the Major or General programme. (See second paragraph under Graduation Standing, on the left.)

#### MAJOR PROGRAMME

The Major programme requires the completion of the first 30 units in conformity with the above regulations and the remaining units in conformity with general University regulations on pages 12-15 and as follows: courses selected to include the major, consisting of 15 units of courses numbered 300 and above, as specified by the department; and at least 15 units of electives which may, when desirable, include not more than 9 units prescribed by the department as corequisites.

Students in the Faculty of Arts and Science may elect to complete the requirements for each of two Major programmes offered in the Faculty. In any case where a double major is selected, however, the student shall be eligible to proceed to no more than one Bachelor's degree.

#### GENERAL PROGRAMME

The General programme requires completion of the first and second years in conformity with the regulations above, and in conformity with general University regulations given on pages 12-13 and as follows: 9 units taken in courses numbered 300 and above, as may be specified by the department, in each of two fields; and 12 units of electives which may, when desirable, include not more than 6 units prescribed by the department as corequisites.

# PROGRAMMES LEADING TO THE DEGREE OF **BACHELOR OF ARTS\***

In order to qualify for a B.A. degree a student must present at least 33 units (of the minimum 60 units required for a degree) of courses from the following academic units while meeting the general requirements specified on page 23 and for the degree programme selected: Anthropology, Classics, Creative Writing, Economics, English, Environmental Studies, French Language and Literature, Geography, Germanic Languages and Literature, Hispanic and Italian Studies, History, Liberal Studies, Linguistics, Mathematics, Pacific Studies, Philosophy, Political Science, Psychology, Slavonic

and Oriental Studies, Sociology.
Students may proceed to a B.A. degree in an Honours or a Major pro-

gramme in the following fields:

Anthropology Classical Studies (Major only) Classics

Creative Writing (Major only)

Economics English French Geography German

Greek (Honours only)

History

Latin (Honours only)

Liberal Studies

(Major only - see below)

Linguistics Mathematics

Pacific Studies (Major only)

Philosophy Political Science Psychology Russian Social Welfare

(Major only — see below)

Sociology Spanish

A student may proceed to a B.A. degree in a General programme in any two of the above fields, except as indicated, or in one of the above fields and one of the following: Biology, Chemistry, Physics.

# PROGRAMMES LEADING TO THE DEGREE OF **BACHELOR OF SCIENCE**

In order to qualify for a B.Sc. degree, a student must present at least 33 units (of the minimum 60 units required for a degree) of courses from the following departments while meeting the general requirements specified on page 24 and for the degree programme selected: Bacteriology and Biochemistry, Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

A student may proceed to a B.Sc. degree in the Honours programme in one of the following: Astronomy, Bacteriology, Biochemistry, Biology, Chemistry, Geography, Mathematics, Physics, Physics and Applied Mathematics, Psychology.

A student may proceed to a B.Sc. degree with a major in one of the following: Astronomy, Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

A student may proceed to a B.Sc. in a General programme in any two of the following: Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

#### INTERDISCLIPLINARY PROGRAMMES

#### BACHELOR OF ARTS WITH A MAJOR IN LIBERAL STUDIES:

This is an experimental interdisciplinary programme which is described on page 75.

#### BACHELOR OF ARTS WITH A MAJOR IN SOCIAL WELFARE:

The Bachelor of Arts with a Major in Social Welfare requires, in the Third and Fourth Years, a minimum of 33 units. Of these 33 units, 9 must be taken in courses numbered 300 or higher as required for the General Programme specified by the Department concerned in each of two of the following fields: Anthropology, Economics, Political Science, Psychology, Sociology. Either as part of these two areas of concentration or in addition to them, the student must complete Psychology 335 and Sociology 350. In

addition, the Major requires Social Work 400, an Introduction to Social

N.B. Effective 1976-77, no further registrations in this programme will be accepted.

#### **ENVIRONMENTAL STUDIES PROGRAMME:**

The Environmental Studies Programme is an interdisciplinary programme designed to provide students with a concentration of courses in the area of environmental topics. Details of the programme are given on pages 58 and

#### INTERDEPARTMENTAL OFFERINGS:

Liberal Arts 305, a senior course in the humanities, given on an interdepartmental basis, is available an an elective (see page 76).

#### PACIFIC STUDIES PROGRAMME:

The Pacific Studies Programme is an interdisciplinary programme designed to provide a concentration in the area of Pacific studies for both general education and professional purposes. Details of the programme are given on page 85.

\* Bachelor of Arts degrees in History in Art and in History in the Arts are offered in the Faculty of Fine Arts. The Bachelor of Arts is also offered in the Child Care Programme.

#### **COURSES OPEN TO FIRST YEAR STUDENTS**

For the guidance of students entering First Year, the following is a list of courses open to First Year students. In some cases prerequisites are specified. In others permission of the department is required. Students should consult the appropriate departmental entry elsewhere in this Calendar.

Anthropology 100 Astronomy 120 Bacteriology 101 Biology 150 Chemistry 120, 124 Chinese 100, 301

Classical Studies 100, 207 Computing Science 170, 171

Creative Writing 100

Economics 100

English 111, 115, 121, 122 French 100, 160, 180

Geography 101

German 100, 140, 200, 204, 295

Greek 100

History 205, 210, 220, 230, 234, 236, 240, 242, 250, 252

Italian 100, 200 Japanese 100, 301 Latin 100 Linguistics 100

Mathematics 100, 101, 102, 110, 130, 151, 180

Philosophy 100, 102, 202, 207 211, 212, 222, 232, 233, 242, 245, 269

Physics 101, 103, 121 Political Science 100 Psychology 100 Russian 100, 301, 390

Sociology 100

Spanish 100, 240, 260, 290

# RECOGNIZED COURSES OFFERED BY OTHER FACULTIES

The following First Year courses in the Faculty of Fine Arts are open to students for elective credit in the Faculty of Arts and Science:

Art 100

History in Art 120

Music 100, 110, 115

Theatre 100

Students in other than First Year should note that the following courses in the Faculty of Education and the Faculty of Fine Arts, in addition to those mentioned above, are acceptable for elective credit in the Faculty of Arts and Science (subject to change — see Calendar supplement issued later):

Education 490

History in Art 221, 230, 340, 351, 353, 380, 390, 481, 490

Music 200, 300, 311, 312, 313, 320, 400

Theatre 310, 311, 312, 390-394 (one only), 410 and 411 (11/2 units maximum for each)

# COURSES NOT RECOGNIZED IN THE FACULTY OF ARTS AND SCIENCE

Students are permitted to take for credit a total of 6 units of free electives chosen without restriction from any undergraduate courses offered in this University (except for Physical Éducation courses numbered 105-124),

where the regulations of the departments offering the courses permit, and prerequisites are met. In exceptional cases, a student in a Major or Honours programme may receive additional units of Arts and Science credit for undergraduate courses not recognized for credit in the Faculty of Arts and Science, provided that prior written permission of the department in which the student wishes to undertake a Major or Honours has been obtained. In no case, however, may such credit be used to replace that specified for the Major or Honours programme selected, nor may the credit for such courses be later transferred to another Major or Honours programme unless the credit is then accepted by the department concerned.

#### SUMMER SESSION AND OTHER CREDIT

#### SUMMER SESSION

Although the degrees in this Faculty are normally granted on completion of the required units in the winter session, credit obtained in summer session may be combined with that obtained in winter session to complete the required number of units.

#### STUDIES ELSEWHERE

Students who plan to undertake work at other universities must receive prior approval from the Dean or the Registrar if they wish such courses to be credited towards a degree at the University of Victoria. Upon successful completion of such work, the student must request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria. Extramural work done at other universities prior to registration at the University of Victoria may be accepted, if approved by the Faculty, but may not exceed 3 units in respect of any one academic year, or normally, a maximum of 15 units subsequent to Grade XIII.

#### **FULL-TIME STUDIES**

Although candidates may complete degree requirements by registration in Summer Session and Evening courses, all candidates are urged to register as full-time students for at least one Winter Session, preferably that of the Final Year.

#### FOURTH YEAR CREDIT FOR MEDICAL STUDIES

A student who has taken his first three years at the University of Victoria may be granted a B.A. or a B.Sc. after at least one year of a medical or dental programme provided that the courses he takes at the medical or dental school, when combined with those taken at the University of Victoria, are deemed equivalent to those which would be required at the University of Victoria either for a general or a major programme. Only courses which do not overlap courses taken at the University of Victoria and which are acceptable to the appropriate department(s) will be accepted for credit. The University shall receive assurance from the other university that a Bachelor of Arts or a Bachelor of Science degree will not be granted for the same work.

A student must apply through the Records Office for assessment by the

department or departments concerned.

If a student contemplates transferring to a medical or dental school before graduation, he should consult with the department or departments concerned prior to registering in his third year so that he may choose his courses to meet the requirements of a major or a general programme. Following completion of his third year, he should then confirm in writing to the Records Office his intention to transfer to a medical or dental school and seek credit for work taken there towards his bachelor's degree.

Following completion of the work required for the degree, a departmental recommendation for a bachelor's degree will be made through the Faculty

to the Senate.

Students are referred to page 12 for regulations concerning graduation requirements.

# COURSES IN ARTS AND SCIENCE

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English	52
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French	60
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History in Art (see Faculty of Fine Arts)	
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Linguistics	76
Marine Science	38
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Philosophy	86
Physics	90
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Russian	103
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Serbo-Croatian	104
Social Work	105
Sociology	105
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Statistics	84

# DEPARTMENT OF ANTHROPOLOGY

Orville S. Elliot, A.B. (Middlebury), A.M., Ph.D. (Harvard), Associate Professor, and Chairman of the Department.

Robert F. Gray, M.D. (Northwestern), M.A., Ph.D. (Chicago), Professor. Gordon K. Hirabayashi, B.A., M.A., Ph.D. (Wash.), Visiting Professor (1975-76).

William H. Alkire, B.A. (Wash.), M.A. (Hawaii), Ph.D. (Ill.), Associate Professor.

N. Ross Crumrine, B.A. (Northwestern), M.A., Ph.D. (Arizona), Associate Professor. (On study leave 1976-77.)

Robert B. Lane, A.B., Ph.D. (Wash.), Associate Professor.

Donald H. Mitchell, B.A., B.Com., M.A. (Brit. Col.), Ph.D. (Ore.), Associate Professor.

Leland H. Donald, B.A. (Emory), Ph.D. (Ore.), Assistant Professor.

Kathleen A. Mooney, B.A. (U. of Vic.), M.A., Ph.D. (Michigan), Assistant Professor.

Nicolas Rolland, B.Sc., M.A. (Montreal), Lecturer.

Ross D. E. MacPhee, B.A. (Brit. Col.), Sessional Lecturer (1975-76).

Robert A. Randall, B.S. (Bucknell), M.A. (S.U.N.Y. Binghamton), Sessional Lecturer (1975-76).

Marjorie R. Mitchell, Part-time Sessional Lecturer (1975-76).

Frans Lamers, B.A., M.A. (S. Fraser), Part-time Sessional Lecturer (1975-76.)

#### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 144; for graduate courses, see page 28.

#### **GENERAL, MAJOR AND HONOURS PROGRAMMES**

While Anthropology 100 is not required for the General, Major, or Honours Programmes, First Year students who plan to undertake any of these programmes are urged to enrol in the introductory course.

General — Second Year: Anthropology 200, 240 and 250; Third and Fourth Years: nine additional units of Anthropology chosen from courses numbered 300 and above.

Major — Second Year: Anthropology 200, 240 and 250; Third and Fourth Years: a total of 15 units in Anthropology consisting of:

- (a) 300, and at least one of 341 or 350;
- (b) three units from 322, 323, 324, 325, 326, 327, 328, 329, 334, 339, chosen to include two ethnographic areas;
- (c) three units from 400, 401, 416, 417, 418, 441;
- (d) three units from 305, 306, 310, 335, 341, 405, 406, 407, 419, 449, 451;
- (e) one of Linguistics 100, 220, 360, 361, or 3 units of Linguistics chosen in consultation with the Department of Anthropology.

Students who are allowed to take 390 or 490 should consult the department when planning their programmes.

Honours — Second Year: Students who have achieved at least high Second Class standing in Anthropology 200, 240 and 250 may be admitted to the Third Year in the Honours Programme with the permission of the Department; Third and Fourth Years: Students will offer at least 33 units of which 24 must be in Anthropology and include:

- (a) 300, 341, 350, and 499;
- (b) three units chosen from 400, 416 and 417;
- (c) three units from 322, 323, 324, 325, 326, 327, 328, 329, 334, 339, chosen to include two ethnographic areas;
- (d) six units chosen to include at least one and a half units from each of the following groups:
  - (i) 305, 306, 310, 335, 401, 405, 406, 407, 412, 418, 419;
  - (ii) 341, 441, 449 and 451.

In addition students will be expected to achieve satisfactory standing in courses in Linguistics and in techniques of analysis chosen in consultation with the Department. Students who are allowed to take 390 or 490 should consult the department when planning their programmes.

The First Class Honours degree requires a grade point average of 6.5 or better in upper level courses. A Second Class Honours degree will be awarded for a grade point average between 3.5 and 6.49 in upper level courses. A student who fails to attain a grade point average of 3.5 or better but who completes the requirements for the major degree may be awarded a major degree.

# **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

Prerequisite for Third and Fourth Year Courses:

Courses numbered 300 and above may be chosen as electives if one of the following conditions is satisfied:

- (a) Completion of Anthropology 100 as a prerequisite and completion of other prerequisites specified for the course selected.
- (b) Completion of Anthropology 200 as a prerequisite or corequisite and completion of other prerequisites or corequisites specified for the course selected.
- (c) The student has at least Third Year standing and the permission of the course Instructor.

NOTE 1: Students qualifying under (b) taking 200 as corequisite and students qualifying under (c) may find it necessary to do additional reading. NOTE 2: Students who have taken Anthropology 100 as a First Year elective may also enrol in Anthropology 200 and/or 240 and/or 250 as electives in their Second or later years.

#### ANTH 100 (formerly 200). (3) Introduction to Anthropology

Surveys the field and basic concepts of the discipline; origins of man and culture; nature of race; development of culture. The comparative study of cultural institutions such as social structure, language, art, religion. For students who have had no prior course in Anthropology. Anthropology 100 is intended for First Year students and others wishing a general survey of the field.

(3-0; 3-0)

#### ANTH 200 (formerly 201). (3) Cultural and Social Anthropology

An introduction to the analysis of socio-cultural systems. Substantive materials will be taken from societies representing different levels of complexity and various parts of the world.

Prerequisite: At least Second Year standing or completion of Anthropology 100. (3-0; 3-0)

#### ANTH 240. (11/2) Archaeology

An introduction to archaeological research and problems of interpretation. Laboratories will provide an opportunity to become familiar with archaeological materials and with some basic techniques of analysis.

Prerequisite: At least Second Year standing or completion of Anthropology 100. September-December only. (2-2)

#### ANTH 250. (11/2) Physical Anthropology

An introduction to the investigation of biological characteristics of human populations; evolution of human populations. Laboratories will introduce students to some basic techniques used in the study of physical anthropology.

Prerequisite: At least Second Year standing or completion of Anthropology 100.

January-April only. (2-2)

#### ANTH 300. (3) Comparative Social Organization

Comparative analysis of social structure with emphasis on kinship oriented societies. Consideration of causes and conditions of change in social structures.

Prerequisite: Anthropology 200 or permission of instructor. (3-0; 3-0)

#### ANTH 305. (11/2) Primitive Arts and Crafts

The development and functions of arts and crafts in prehistoric and primitive cultures. Major traditions and their distributions.

September-December only. (3-0)

#### ANTH 306. (11/2) Folklore and Mythology

Oral traditions of non-literate peoples. The structure and functions of specific types of materials. The relations of the study of folklore and mythology to other interests in Anthropology. September-December only. (3-0)

# ANTH 310. (11/2) Anthropological Approaches to Comparative Religion

Consideration of the various approaches to the study of religion and religious behaviour used by anthropologists. Comparative analysis of belief and ritual systems. (3-0)

#### ANTH 322. (11/2) Ethnology of North America

The major culture areas of aboriginal North America with description and analysis of selected cultures; introduction to problems in the interpretation of North American ethnology.

September-December only. (3-0)

#### ANTH 323 (formerly 422). (1 1/2) Ethnology of the Circum-Polar Region

The cultures of Arctic and Sub-Arctic Eurasia and North America.
September-December only. (3-0)

#### ANTH 324. (1 1/2) Ethnology of Middle America

An integrated description and analysis of the cultural history and present-day economic, social, political, and religious ways of life of selected Indian and mestizo groups of Mexico and Central America; recent changes and modern trends in cultural development.

January-April only. (3-0)

#### ANTH 325. (1 1/2) Ethnology of South America

An integrated description and analysis of the cultural history and present-day economic, social, political, and religious ways of life of selected Indian groups of South America.

September-December only. (3-0)

#### ANTH 326. (1 1/2) Ethnology of Oceania: Micronesia and Polynesia

Ethnological description and analysis of the cultures of Micronesia and Polynesia.

January-April only. (3-0)

#### ANTH 327. (11/2) Ethnology of Oceania: Australia and Melanesia

Ethnological description and analysis of the aboriginal peoples and cultures of Australia and Melanesia. September-December only. (3-0)

#### ANTH 329 (formerly 328). (1 1/2) Ethnology of Southeast Asia

An integrated description and analysis of the peoples and cultures of Mainland and Island Southeast Asia. September-December only. (3-0)

#### ANTH 334. (11/2) Ethnology of Sub-Saharan Africa

A survey of the traditional cultures of sub-Saharan Africa; recent changes and problems of modernization.

January-April only. (3-0)

#### ANTH 335 (Sociology 335). (3) Minority and Ethnic Group Relations

Minority and ethnic groups within complex societies with special reference to Canada. (3-0; 3-0)

#### ANTH 339. (3) Indians of the Pacific Northwest

Native cultures of the Pacific Northwest and anthropological problems presented by this area; a survey of the native peoples of the New World; racial, linguistic and cultural relationships; intensive study of a few representative tribes.

(3-0; 3-0)

#### ANTH 341. (3) Old World Archaeology

The archaeological record for the behavioural study of early and ancient societies as provided by the evidence from Africa, Eurasia and Oceania. Review of the direct evidence for subsistence systems, technologies, and past societies in a chronological and palaeo-environmental framework. Interpretation of the record from the earliest traces of hominid behaviour up to mediaeval times in an anthropological perspective.

Prerequisite: Anthology 240. (3-0; 3-0

#### ANTH 350 (formerly 340). (3) Evolution and Adaptation in Human Populations

Evolutionary theory and population biology with special reference to the evolution of man; bases of intra-population and inter-populational variability; cultural biological interaction in contemporary populations. (Students will find some background in biology helpful for this course.)

Prerequisite: Anthropology 250 or at least Third Year standing and permission of the instructor. (3-0; 3-0)

# ANTH 390. (1 1/2) Selected Problems in Anthropology

Presentation of selected problems in Anthropology. Students interested in this course should inquire at Registration when the course is to be offered and what substantive areas are to be studied. Students may enroll in this course in different areas for a maximum of 3 units.

Prerequisites: Permission of instructor (3-0)

# ANTH 400. (3) Anthropological Theory

The first half of the course will present an integrated survey of anthropological theory. The second half will involve student and faculty presentations and discussions of specific theoretical points.

Open to third and fourth year students.

(3-0; 3-0)

#### ANTH 401. (11/2) Cultural Ecology

Theories concerning the relationship of man, culture and environment; cultural systems as the means by which human populations adapt to their environments.

September-December only. (3-0)

#### ANTH 405 (formerly 404, 405). (11/2) Economic Anthropology

A comparative analysis of the social context of production, distribution and exchange systems.

September-December only. (3-0)

# ANTH 406. (1 1/2) Political Anthropology

Comparative analysis of governing institutions in societies ranging from tribal groups to various types of state organizations. In each type of political system, the modes of allocating decision-making powers and administrative authority will be examined.

January-April only. (3-0)

#### ANTH 407. (11/2) Symbolic Anthropology

A comparative study of the function of symbolism in social, ritual, and cognitive systems. An examination of the structural and functional relations of cultural, social, and personality systems from the viewpoint of man as a symboling animal. Selected human groups will be analyzed from this point of view and the relations between symbolic systems and culture change will be discussed.

Prerequisite: In addition to Anthropology 100 or 200, 306 is recommended. January-April only. (3-0)

#### ANTH 412. (11/2) Magic and Medicine in Tribal Societies

Survey of anthropological theories of magic; consideration of the concept of ethnomedicine and its relation to magic; study of ethnographic literature relating to these topics.

Prerequisites: Anthropology 200 or permission of instructor. (3-0)

#### ANTH 416. (11/2, formerly 3) Introduction to Anthropological Research: I

Designed to introduce students to research methods suitable for anthropological problems. Emphasis is placed on formulation of researchable anthropological propositions, research design, and elementary techniques of data analysis.

September-December only. (3-0)

# ANTH 417. (1 ½) (formerly half of 416) Introduction to Anthropological Research: II

Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method.

Prerequisite: Anthropology 416, or permission of the instructor.

January-April only. (2-2)

#### ANTH 418 (Sociology 418). (11/2) Social Change

General theory of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas.

September-December or January-April. (3-0)

#### ANTH 419 (Sociology 419). (11/2) Modernization and Development

Process of modernization. Industrialization and urbanization in the contemporary world.

September-December or January-April. (3-0)

#### ANTH 441. (11/2) Archaeological Method and Theory

Techniques of excavation, description and analysis of archaeological materials, research design and preparation of reports; the historical and anthropological contexts of archaeological research.

Prerequisite: Anthropology 240. September-December only. (2-2)

#### ANTH 449. (11/2) Archaeology of the Pacific Northwest

Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled.

January-April only. (2-2)

#### ANTH 451. (11/2) Method and Theory in Physical Anthropology

Advanced topics concerned with theory and method in physical anthropology. The course will include laboratory work in analysis of skeletal populations; anthropometric studies in living populations, and blood group analysis; lectures and seminars on the theory of population divergence; and introduction to quantitative methods in physical anthropology.

Prerequisites: Anthropology 350 or permission of instructor.

September-December only. (2-2)

#### ANTH 490. (1-3) Directed Studies

Students may register for this course in the Fourth Year of the Major or Honours Programme with permission of the Department and the Instructor.

Prerequisites: Fourth Year standing and permission of the Department and the Instructor.

ANTH 499. (3) Honours Seminar and Graduating Essay

#### **GRADUATE COURSES**

#### ANTH 500. (3) Seminar in Anthropological Theory

ANTH 501. (11/2) Seminar in Social and Cultural Anthropology

# \*ANTH 510. (11/2) Selected Topics in Social and Cultural Anthropology:

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

510A Social Organization

510B Economic Anthropology

510C Political Anthropology

510D Anthropology of Religion

510E Symbolic Anthropology

510F Cultural Ecology

510G Culture Change

#### \*ANTH 530. (11/2) Ethnology of Selected Areas:

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

530A North America

530B Circum-Polar Region

530C Middle America

530D South America

530E Oceania

530F Northeast Asia

530G Southeast Asia

530H Sub-Saharan Africa

530J Pacific Northwest

ANTH 540. (11/2) Seminar in Archaeology and Culture History

\*ANTH 542. (11/2) Archaeology of a Selected Area

ANTH 550. (1 1/2) Seminar in Physical Anthropology

\*ANTH 552. (1 1/2) Selected Topics in Physical Anthropology

\*ANTH 590. (1 1/2-3) Directed Studies

ANTH 599. (3) Thesis

\*Students must consult the Department before enroling in this course.

# DEPARTMENT OF BACTERIOLOGY AND BIOCHEMISTRY

Trevor J. Trust, B.Sc., M.Sc., Ph.D. (Melbourne), Associate Professor and Chairman of the Department.

Alex J. Wood, B.S.A., M.S.A. (Brit. Col.), Ph.D. (Cornell), Professor. James T. Buckley, B.Sc., Ph.D. (McGill), Assistant Professor.

# **GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 144; for graduate courses, see page 30.

#### **HONOURS PROGRAMMES**

This department offers programmes leading to honours degrees in Bacteriology or Biochemistry in accordance with the general regulations of the University on pages 12 to 15 of this Calendar, Students who are unable to maintain second class honours standing will normally be advised to withdraw from the Honours Programmes. In certain circumstances a major degree in either Bacteriology or Biochemistry may be recommended by the department to the Faculty after consultation with the Dean, and in accordance with the general regulations of the University on pages 12 to 15 of this Calendar. The department does not offer a general programme

The two recommended course outlines presented below are for the students' guidance. They are not intended to be the only course selections available. Students should consult with the department for assistance in selecting courses other than those listed in the recommended programmes. Students specializing in other disciplines and wishing to augment their training with one or more courses from this department are urged to consult the department at or before the time of registration.

# RECOMMENDED\* HONOURS PROGRAMME — BACTERIOLOGY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	121	201	_	
		122			
	Language	100	200	-	
	Mathematics	130	230		-
	Statistics			253	

#### RECOMMENDED\* HONOURS PROGRAMME - BACTERIOLOGY (Continued)

		First Year	Second Year	Third Year	Fourth Year
Sciences	Bacteriology	_	200	300	400
	Bacteriology	380	380	380	480
	Bacteriology		_		499
	Biochemistry	-		300	400
	Biology		204	200	303
	Biology		207	302	300
	Chemistry	124	224	233	344
	Physics	101		_	_
Total Units		15	18	18	18

# RECOMMENDED\* HONOURS PROGRAMME — BIOCHEMISTRY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	121	201	_	
		122	_		
	Language	100	200		
	Mathematics	130	230		
	Statistics	_	_	253	_
Sciences	Bacteriology	_	200	300	_
	Biochemistry		_	300	400
	Biochemistry	380	380	380	480
	Biochemistry				499
	Biology		204	200	300
	Biology		207		303
	Chemistry	124	224	233	333
	Chemistry				344
	Physics	101		212	_
Total Units		15	18	18	18

Departures from these recommended programmes may be necessary to accommodate special situations beyond the student's control - the department should be consulted.

#### UNDERGRADUATE COURSES

#### BACTERIOLOGY

#### BACT 101. (11/2) Essentials of Bacteriology and Immunology

The basic concepts of bacteriology and immunology with particular reference to human disease. Properties of infectious agents and methods used in their control will be considered. The course will be oriented towards the needs of students of nursing.

September-December, also January-April. (2-2)

#### BACT 200. (3) Introductory Bacteriology

The introductory principles and the language of bacteriology. Techniques for the isolation and cultivation of the bacteria. The relation of bacteria to agriculture, public health and sanitation, fermentation industries and veterinary science. (2-2:2-2)

#### BACT 300. (3) General Bacteriology

The principles and practices of bacteriology. The basic concepts of immunology, serology, physiology, nutrition, genetics and cytology. (2-2; 2-2)

#### BACT 380. (0) Seminar

Attendance and participation is required of students in the first three years of the Bacteriology Honours programme.

Members of the Department.

(2-0; 2-0)

#### BACT 400. (3) Advanced Bacteriology

An in-depth study of bacteriology. Specific concepts in the principal areas.

(2-2; 2-2)

# BACT 470. (1-3) Directed Studies in Bacteriology

Members of the Department.

#### BACT 480. (1 1/2) Seminar

Attendance and participation is required of students in the fourth year of the Bacteriology Honours programme.

Members of the Department.

(2-0; 2-0)

#### BACT 499. (3) Undergraduate Thesis

Research under the direction of a staff member. Open to Bacteriology Honours students only.

#### **UNDERGRADUATE COURSES**

#### **BIOCHEMISTRY**

#### BIOC 201. (11/2) Essentials of Nutritional Biochemistry

The basic concepts underlying the science and practice of nutrition. Properties of the various nutrients will be considered. The formulation of these nutrient categories into adequate diets for man under conditions of health and disease will be covered. The course will be oriented to students seeking a knowledge of man's nutritive needs and the mechanisms and food supplies available to meet these needs. This orientation can be achieved for students with a limited background in mathematics, physics, chemistry or biochemistry.

September-December, also January-April. (3-0)

#### BIOC 300. (3) General Biochemistry

An introduction to the biocheimstry of plant and animal systems. The structure and metabolism of their components. Enzyme kinetics. Protein and nucleic acid synthesis and metabolic control mechanisms.

Texts: Lehninger, Biochemistry; Frais, Practical Biochemistry. (2-2; 2-2)

#### BIOC 380. (0) Seminar

Attendance and participation is required of students in the first three years of the Biochemistry Honours programme.

Members of the Department.

(2-0; 2-0)

#### BIOC 400. (3) Biochemistry

A comprehensive study of the chemistry of biological systems. Topics will include the chemistry of constituents of living organisms and of the anabolic and catabolic pathways of metabolism. (2-2; 2-2)

#### BIOC 470. (1-3) Directed Studies in Biochemistry

Members of the Department.

#### BIOC 480. (1 1/2) Seminar

Attendance and participation is required of students in the fourth year of the Biochemistry Honours programme.

Members of the Department.

(2-0; 2-0)

#### BIOC 499. (3) Undergraduate Thesis

Research under the direction of a staff member. Open to Biochemistry Honours students only.

#### **GRADUATE COURSES**

BACT 500. (3) Advanced Bacteriology

BACT 510. (3) Topics in Bacteriology

BACT 570. (3) Directed Studies

BACT 580. (0) Seminar

BACT 599. (3-6) M.Sc. Thesis

BIOC 500. (3) Advanced Biochemistry

BIOC 510. (3) Advanced Nutritional Biochemistry

BIOC 570. (3) Directed Studies

BIOC 580. (0) Seminar

BIOC 599. (3-6) M.Sc. Thesis

BIOC 600. (3) Topics in Biochemistry

BIOC 699. (3-9) Ph.D. Dissertation

# DEPARTMENT OF BIOLOGY

Michael J. Ashwood-Smith, B.Sc., M.Sc. (Durham), Ph.D. (London), Professor and Chairman of the Department.

F. Thomas Algard, A.B. (San Jose St.), Ph.D. (Stanford), Professor.

W. Gordon Fields, B.A. (Brit. Col.), A.M., Ph.D. (Stanford), Professor.

Arthur R. Fontaine, B.Sc. (McGill), D.Phil. (Oxon.), Professor. (On leave of absence to December 31, 1976.)

George O. Mackie, B.A., M.A., D.Phil. (Oxon.), Professor.

John N. Owens, B.S. (Portland St.), M.S., Ph.D. (Ore.), Professor. (On study leave 1976-77.)

Alan P. Austin, B.Sc., Ph.D. (Wales), Associate Professor.

David J. Ballantyne, B.Com. (Brit. Col.), M.Sc. (Wash. St.), Ph.D. (Maryland), Associate Professor.

Marcus A. Bell, B.S.F. (Brit. Col.), M.F. (Yale), Ph.D. (Brit. Col.), R.P.F., Associate Professor and Curator of the Herbarium.

Derek V. Ellis, B.Sc. (Edin.), M.Sc., Ph.D. (McGill), Associate Professor.

Edwin M. Hagmeier, B.A. (Queen's), M.A., Ph.D. (Brit. Col.), Associate Professor.

John S. Hayward, B.Sc., Ph.D. (Brit. Col.), Associate Professor.

Louis A. Hobson, B.S. (Humboldt St. Coll.), M.S., Ph.D. (Wash.), Associate Professor. (On study leave 1976-77.)

Jack L. Littlepage, B.A. (San Diego), Ph.D. (Stanford), Associate Professor.

John E. McInerney, B.Sc., (Ottawa), M.Sc., Ph.D. (Brit. Col.), Associate Professor. (On leave of absence 1975-78.)

Robert G. B. Reid, B.Sc., Ph.D. (Glasgow), Associate Professor.

David H. S. Richardson, B.Sc., M.Sc. (Nottingham), D.Phil. (Oxon.), Visiting Associate Professor (1975-76).

Richard A. Ring, B.Sc., Ph.D. (Glasgow), Associate Professor.

E. Derek Styles, B.S.A. (Brit. Col.), Ph.D. (Wis.), Associate Professor. (On study leave 1976-77.)

Patrick T. Gregory, B.Sc. (Tor.), M.Sc., Ph.D. (Man.), Assistant Professor.

Diane F. Malley, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Mich.), Visiting Assistant Professor (1975-76).

John W. Paden, B.S. (Calif.), M.S., Ph.D. (Idaho), Assistant Professor.

Miles Paul, A.B. (Harv.), Dip. in Educ. (Makerere), Ph.D. (Stanford), Assistant Professor.

Harold J. Brodie, B.Sc., M.Sc., (Man.), Ph.D. (Mich.), Part-time Lecturer (1975-76).

Allan C. Brooks, B.A. (Brit. Col.), M.A. (Tor.), Part-time lecturer (1975-76).

Peter A. Dill, B.Sc., M.Sc. (Brit. Col.), Ph.D. (West. Ont.), Part-time Lecturer (1975-76).

David O. Evans, B.Sc. (U. of Vic.), M.Sc. (Tor.), Sessional Lecturer (1975-76).

Thomas F. Mace, B.Sc. (U. of Vic.), M.Sc. (Nfld.), Ph.D. (Guelph), Part-time Sessional Lecturer (1975-76).

Karen A. Ondrick, B.S. (Wheeling), Ph.D. (Georgetown), Sessional Lecturer (1975-76).

Julian D. Reynolds, B.A., M.A., M.Sc. (Trin. Coll. Tor.), Ph.D. (Brit. Col.), Sessional Lecturer (1975-76).

Arthur T. Bergerud, B.Sc. (Ore. St.), M.Sc. (Wis.), Ph.D. (Brit. Col.), Honorary Associate Professor.

Hamish D. W. Bridgman, C.D., B.Sc. (U. of Vic.), B.A., M.A. (Cantab.), Administrative Assistant.

Hans (Jack) F. Dietrich, Senior Scientific Assistant.

Yousuf A. Ebrahim, M.Sc. (York), Senior Laboratory Instructor.

John G. S. Trelawny, B.Sc. (U. of Vic.), Senior Laboratory Instructor.

#### **GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 145; for graduate courses, see page 39.

#### GENERAL, MAJOR AND HONOURS PROGRAMMES

In all cases, students planning a programme in Biology should consult with the Departmental Office for advice.

Honours and Major programmes in Biology consist of (a) a Core of required Biology courses, (b) Corequisites in the physical sciences, and (c) additional courses to complete a programme in one of the following Options:

Botany

Ecology

Functional Biology

Marine Biology

Zoology

The core and science corequisites for Honours and Major Programmes are outlined on this page. Recommended programmes for the options may be found on page 32.

B.S. General and B.A. General programmes should be chosen to meet the requirements as set out in the Programme outline on this page.

NOTES: (These refer to the chart on this page.)

- 1) Biology 150 or equivalent is prerequisite to all other courses in the Department unless otherwise stated in course descriptions. The Biology 150 requirement may be considered fulfilled by any one of: Biology 105, Botany 105, Zoology 105, Bacteriology 200, Grade XIII Biology, Botany or Zoology. Students who have passed Biology 11 and 12 may enroll in courses for which Biology 150 is prerequisite while students having credit only in Biology 11 should take Biology 150. Students having only Biology 11 may, under special circumstances, bypass Biology 150 with permission from the Biology Department. Counselling on this matter may be obtained from the Biology Department preceding and during registration.
- 2) The minimum Physics requirement can be satisfied by completion of both Physics 11 and 12, or by Physics 101. Physics 101 requires Mathematics 102 or 130 as corequisite.
- 3) Students considering going on to professional schools, e.g. Medicine, Dentistry, etc. and any other students requiring a second year course in physical chemistry should choose Chemistry 124 as prerequisite for Chemistry 224.
- 4) Mathematics 130 or equivalent must be taken if a student intends to take advanced courses in Mathematics, Chemistry, or Physics; otherwise Mathematics 102 and 151 are advised.

Students planning to become professional biologists should be prepared to continue their studies into graduate school and, in preparation for this, are advised to take either an Honours or a Major B.Sc. Programme, the Honours Programme being preferable.

Proficiency examinations in one or two modern languages are usually required in graduate studies, and students planning graduate work are advised to elect one or two courses in French, German, Russian or other

modern languages on departmental recommendation. Students are advised of the usefulness of Biometrics in most biological work and of the increasing use of computers in many areas of biology. The Department should be consulted regarding areas for which computer train-

ing or extra Mathematics courses are advisable. The provision exists (see page 26: Fourth Year Credit for Medical Studies) for students who have taken their first three years at the University of Victoria to be granted a B.A. or a B.Sc. from the University of Victoria after at least one year of a medical programme. Biology students contemplating entry into medicine after the third year should consult with the Department about their choice of undergraduate courses as soon as possible to ensure the necessary provisions outlined on page 26 can be met.

Students may be required to meet part of the expenses involved in required field trips or the supplying of course manuals.

#### **BIOLOGY PROGRAMMES**

B.Sc. HONOURS		B.Sc. MAJOR	
Core		Core	
Biol. 150 (1)	3	Biol. 150 (1)	3
Biol. 200	3	Biol. 200	3
Biol. 203/204	3	Biol. 203/204	3
Biol. 206/207	3	Biol. 206/207	3
Biol. 300/306	3	Biol. 300/306	3
One of Biol. 303, 305 or 331	3	One of Biol. 303, 305, or 331	3
Biol. 304	3	Minimum of 9 Biology	
Biol. 460	1	units chosen to com- plete option	9
Biol. 499	3	piete option	_
Minimum of 12 Biology units chosen to com- plete option	12	Minimum No. of Bio- logy units	27
	_	Corequisites	
Minimum No. of Biology units	37	Phys. 101(2) Chem. 120 or 124 (3)	3
Corequisites		Math. 130 or 102/151	
Phys. 101(2)	3	or equivalent (4)	3
Chem. 120 or 124(3)	3	Chem. 230 or 233	3 21
Math. 130 or 102/151		Electives	21
or equivalent (4)	3	TOTAL UNITS	60
Chem. 230 or 233	3	TOTAL UNITS	00
Electives	12		
TOTAL UNITS	61		

B.Sc. GENERAL		B.A. GENERAL
Biol. 150 (1)	3	Biol. 150 (1)
Minimum of 6 units of 200 level Biology courses	6	Minimum of 6 units of 200 level Biology courses
Minimum of 9 units of acceptable Bio- logy courses num-	0	Minimum of 9 units of acceptable Bio- logy courses num- bered 300 and above
bered 300 and above	9	bered 300 and above
Minimum No. of Biol.		Minimum No. of Biol.
units	18	units 18
Phys. 101(2)	3	Corequisites
Phys. 101 or 102 (2)	3	Chem. 120 or 124 (3)
Chem. 120 or 124 (3)	3	
Math. 130 or 102/151 or equivalent (4)	3	
		<sup>1</sup> See note 1) on left

<sup>&</sup>lt;sup>2</sup> See note 2) on left.

<sup>&</sup>lt;sup>3</sup> See note 3) on left.

<sup>4</sup> See note 4) on left.

#### RECOMMENDED PROGRAMMES FOR MAJOR AND HONOURS

The five options listed on the following pages are examples of programmes commonly chosen but they are not intended to be the only options available. Programmes designed to fit the specific needs of a student may be made with the approval of the Department as long as they fulfil the requirements listed in the chart on page 31.

#### **MAJOR**

#### **Botany Option**

First Year		Second Year		Third Year		Fourth Year	
Biol. 150 <sup>1</sup>	3	Biol. 200	3	Biol. 300/ 306	3	Biol. 318/ 418	3
Chem. 120 or 124	3	Biol. 203/ 204	3	Biol. 331	3	Biology Group I Electives	3
Phys. 101	3	Biol. 206/ 207	3	Biol. 343 and 344	3		
Math. 102/ 151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives <sup>2</sup>	3	Electives <sup>2</sup>	3	Electives <sup>3</sup>	6	Electives <sup>3</sup>	9
	15		15		15		15

#### **Biology Group I Electives**

Biol. 411 (3), 420 ( $1\frac{1}{2}$ ), 422 ( $1\frac{1}{2}$ ), 423 ( $1\frac{1}{2}$ ), 452 ( $1\frac{1}{2}$ ).

Departmental Advisors in Botany: Drs. Austin (Phycology), Ballantyne (Physiology), Bell (Ecology and Taxonomy), Owens (Morphogenesis) and Paden (Mycology).

# **Ecology Option**

First Year		Second Year		Third Year		Fourth Year	
Biol. 150 <sup>1</sup>	3	Biol. 200	3	Biol. 300/ 306	3	Biol. 427	1 1/2
Chem. 120 or 124	3	Biol. 203/ 204	3	Biol. 303 or 305 or 331	3	Biol. 440	1 1/2
Phys. 101	3	Biol. 206/ 207	3	Biol. 318/ 418	3	Biology Group II Electives	3
Math. 102/ 151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives <sup>2</sup>	3	Electives <sup>2</sup>	3	Electives <sup>3</sup>	6	Electives <sup>3</sup>	9
	15		15		15		15

#### **Biology Group II Electives**

Biol. 406 (3), 408 ( $1\frac{1}{2}$ ), or 316\* ( $1\frac{1}{2}$ ), 411 (3), 420 ( $1\frac{1}{2}$ ) 425 (3),  $426 (3), 427 (1\frac{1}{2}), 428 (1\frac{1}{2}), 432 (1\frac{1}{2}).$ 

Departmental Advisors in Ecology: Drs. Austin (Marine and Freshwater Plant), Bell (Terrestrial Plant), Ellis (Marine), Gregory (Terrestrial and Population), Hagmeier (Terrestrial and Freshwater).

#### **Functional Biology Option**

First Year		Second Year		Third Year		Fourth Year	
Biol. 1501	3	Biol. 200	3	Biol. 300/ 306	3	Biology Group III Electives	6
Chem. 120 or 124	3	Biol. 203/ 204	3	Biol. 303* or 305 or 331	3		
Phys. 101	3	Biol. 206/ 207	3	Biol. 309 or 343 Biology Group II Electives			
Math. 102/ 151 or 130 or equivalent	3	Chem. 230 or 233	3			4	
Electives <sup>2</sup>	3	Electives <sup>2</sup>	3	Electives <sup>3</sup>	6	Electives <sup>3</sup>	9
	15		15		15		15

Biology Group III Electives: Biol. 302\*(3),  $309(1\frac{1}{2})$ ,  $343(1\frac{1}{2})$ , 401(3), 403(3), 405(3), 409(3),  $344(1\frac{1}{2})$  or  $417(1\frac{1}{2})$ ,  $419(1\frac{1}{2})$ ,  $424(1\frac{1}{2})$ , 425(3), 433(3).

Departmental Advisors in Functional Biology: Drs. Algard (Growth and Development), Ashwood-Smith (Cell Physiology), Ballantyne (Plant Physiology), Fields (Invertebrate Embryology), Fontaine (Invertebrate Functional Morphology and Ultrastructure), Hayward (Whole Animal Physiology), McInerney (Environmental and Fish Physiology), Owens (Plant Morphogenesis), Paul (Developmental Zoology), Styles (Genetics).

#### Marine Biology Option

First Year		Second Year		Third Year		Fourth Year	
Biol. 1501	3	Biol. 200	3	Biol. 300/ 306	3	Biol. 301 or 311	3
Chem. 120 or 124	3	Biol. 203/ 204	3	Biol. 303 or 305 or 331	3	Biology Group IV Electives	3
Phys. 101	3	Biol. 206/ 207	3	Biol. 301 or 311	3		
Math. 102/ 151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives <sup>2</sup>	3	Electives <sup>2</sup>	3	Electives <sup>3</sup>	6	Electives <sup>3</sup>	9
	15		15		15		15

Biology Group IV Electives: Biol. 314 (3), 403 (3), 406 (3), 411 (3), 414 (3), 425 (3), 431 (3), 450  $(1\frac{1}{2})$ , 451  $(1\frac{1}{2})$ , 452  $(1\frac{1}{2})$ .

Departmental Advisors in Marine Biology: Drs. Ellis (Benthic Ecology), Fields (Marine Invertebrates: Embryology), Fontaine (Marine Invertebrates: Functional Morphology), Hobson (Oceanography: Phytoplankton), Littlepage (Oceanography: Zooplankton), Mackie (Marine Invertebrates: Behavioural Physiology and Ultrastructure), McInerney (Fish: Physiology and Behaviour), Paul (Marine Embryology), Reid (Marine Invertebrates: Physiology).

<sup>\*</sup> with Departmental permission.

<sup>&</sup>lt;sup>1</sup> See Note 1, page 33. <sup>2</sup> See Note 2, page 33. <sup>3</sup> See Note 3, page 33.

<sup>\*</sup> advised for students considering going on to professional schools, e.g. Medicine, Dentistry, etc.

<sup>&</sup>lt;sup>1</sup> See Note 1, page 33. <sup>2</sup> See Note 2, page 33. <sup>3</sup> See Note 3, page 33.

#### **Zoology Option**

First Year		Second Year		Third Year		Fourth Year	
Biol. 1501	3	Biol. 200	3	Biol. 300/ 306	3	Biology Group V B Electives	6
Chem. 120 or 124	3	Biol. 203/ 204	3	Biol. 303* or 305	3		
Phys. 101	3	Biol. 206/ 207	3	Biol. 309 Biology Group V Electives	1½ 1½		
Math. 102/ 151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives <sup>2</sup>	3	Electives <sup>2</sup>	3	Electives <sup>3</sup>	6	Electives	9
	15		15		15		15

<sup>&</sup>lt;sup>1</sup> See Note 1, below.

Biology Group V Electives: Biol. 301 (3), 302\* (3), 312/313 (3), 314 (3), Biol. 403 (3), 412 (1½), 417/419 (3), 425 (3), 427/428 (3), 431 (3), 432 (1½), 437 1½), 444/445 (3).

\* advised for students considering going on to professional schools, e.g. Medicine, Dentistry, etc.

Departmental Advisors in Zoology: Drs. Fields (Invertebrates), Hayward (Mammalian Physiology), Mackie (Invertebrates), McInerney (Ichthyology), Paul (Developmental Zoology), Ring (Entomology).

NOTES: (These refer to Option charts on page 32.)

- 1) Students who bypassed Biology 150 should take three units selected from Biology 203, 204, 206, and 207 in their first year and Biology 300 and 306 in their second year. They must choose an additional three units of course-work to be taken in their third or fourth year, either from the appropriate Option Electives, or in consultation with the Department.
- 2) Students planning on continuing to graduate studies should consult the department regarding the advisability of taking one or more modern language courses as electives.
- Students are urged to consult a departmental advisor regarding the desirable choice of electives for any particular area of interest within this option. Biology 304 is strongly recommended for all Biology Majors.

#### HONOURS:

Honours students should complete the programme of required courses and Biology electives as described for the Major, and in addition should take Biol. 304 (3) preferably in their third year, Biol. 460 (1) and 499 (3) in their fourth year. Of the remaining 8 units to complete the 60-unit degree requirement, at least 3 units must be from an additional course(s) in Biology chosen in consultation with the Department.

Intending Honours students must discuss their proposed thesis research with a Department faculty member and obtain his approval to serve as their thesis supervisor prior to March 1 of their third year of studies. They should apply in writing to the Chairman of the Biology Department for admission to the Honours programme following agreement of a faculty member to act as supervisor, and also no later than March I of their third year of studies. The completed thesis will be examined by a small committee including the supervisor. Intending applicants should have and should maintain a B+ average in all Department courses.

First Class Honours will be awarded to students obtaining a first class average in 300 and 400 level courses, and must include first class standing in Biol. 499. Second Class Honours will be awarded to students obtaining a second class average in 300 and 400 level courses, and must include at least second class standing in Biol. 499. A student who obtains a first class average in his 300 and 400 level courses but second class standing in Biology 499 will have the option of receiving a B.Sc. with a Major in Biology (With Distinction) or second class Honours. A student who achieves less than second class standing in Biology 499 will graduate under the Major programme provided he fulfills other requirements for the degree. The submission date for the thesis is the last day of lectures.

A student with a D, E, or F grade in any Biology course is advised not to register for further courses in the Department and may not do so without permission of the Department. Provision exists for writing a supplemental examination to improve a course grade.

#### UNDERGRADUATE COURSES

#### BIOLOGY

Unless indicated otherwise, courses begin in September and end in April.

NOTE: Biology 150 or equivalent is normally prerequisite to all other courses in the department except where otherwise stated. For information concerning acceptable equivalents see Note 1, page 31.

#### BIOL 150. (3) Principles of Modern Biology

A broad introduction to biological science emphasizing the principles of cell biology, bioenergetics, physiology, genetics, evolution and ecology. The major plant and animal groups are surveyed, stressing diversity through adaptation. Since many students taking this course do not proceed to other courses in Biology a particular attempt is made to relate biological principles to matters of human concern. The course, therefore, is designed for those with little biological background and those wishing to consolidate their understanding of basic biological science (see Note 1, page 31).

Text: Kirk and Starr, Biology Today, (2nd Ed.).

R. A. Ring and Members of the Department.

(3-3:3-3)

#### BIOL 200 (formerly 402). (3) Cell Biology

This course integrates physical and molecular aspects of biology at the cellular level, while showing how cell biology is basic to an understanding of multi-cellular systems. The major topics of the course are cell theory, the functional morphology of organelles, the cellular environment, enzymology, cellular energetics, reproduction, differentiation, and the control and integration of cellular processes.

Pre- or corequisites: Chemistry 230 or 233.

Text: To be announced.

M. Paul, R. G. B. Reid.

(3-2;3-2)

#### BIOL 203. (11/2) Algae and Fungi

The biology of the algae and the fungi, including discussions of their origins and evolution, ecology, physiology, and use by man. Laboratories will include examination of the cytology and the morphology of marine and freshwater algae, and isolation, pure culture, and identification of fungi. Not open to students with credit for Botany 205.

Text: To be announced.

A. P. Austin, J. W. Paden.

September-December only. (3-3)

#### BIOL 204. (11/2) Metaphyta

Survey of the bryophytes and vascular plants. Cell structure and tissues of vascular plants will be discussed as they relate to plant function. The origin and evolution of plant structures and groups making up the metaphyta will be emphasized. Not open to students with credit for Botany 205.

Text: To be announced.

J. N. Owens.

January-April only. (3-3)

#### BIOL 206. (1 1/2) Invertebrate Zoology

Survey of invertebrate animals, including taxonomy, morphology, life histories and phylogeny. Not open to students with credit for Zoology 301.

Texts: To be announced.

W. G. Fields.

September-December. Also January-April. (3-3)

#### BIOL 207. (1 1/2) Chordate Zoology

A maximum credit of  $1\frac{1}{2}$  units can be obtained in this course.

September December: In this section the patterns of chordate evolution from the point of view of organism-environment interactions will be emphasized. Changes in the structure and organization of vertebrate systems will be studied in relation to the succession of environments exploited by the chordates. This section is recommended for major and non-major students except as follows:

January-April: This section will stress the structure and organization of vertebrate organ systems. Students intending to register later, in Biology 302 (Microanatomy), Biology 303 (Vertebrate Physiology) or who are preparing for future studies in the Health Sciences are advised to register in this

Not open to students with credit for Zoology 202.

Text: To be announced.

(3-3)

<sup>&</sup>lt;sup>2</sup> See Note 2, below.

<sup>&</sup>lt;sup>3</sup> See Note 3, below.

#### BIOL 300. (1 1/2) Genetics

A discussion of the gene concept in the light of present knowledge concerning the nature and function of the genetic material. Reproduction and heredity in eucaryotes and procaryotes; classical concept of the gene; genetic control of biochemical reactions, growth and differentiation: genetic variation in individuals and in populations; genetics and evolution; genetics and man. Demonstration sessions will be arranged. Biology honours and major students should take this course in conjunction with Biology 306.

Pre- or corequisite: Biology 200 (Cell Biology).

Texts: Merrell, An Introduction to Genetics.

E. D. Styles.

January-April only. (3-2)

#### BIOL 301 (formerly ZOOL 301). (3) Invertebrate Functional Morphology

A course for the student who wants an in-depth treatment of invertebrates. Emphasis is placed on concepts and principles of functional morphology; supplementary reading, including recent journals, is encouraged.

Prerequisite: Biology 206. Corequisite: Biology 303 or 305 (Zoology 303 or 305).

Texts: To be announced.

A. R. Fontaine.

(2-3; 2-3)

#### BIOL 302 (formerly ZOOL 302). (3) Microanatomy

A course designed to lead to an understanding of the microscopic structure of the cells, tissues, and organs of higher vertebrates. Functions of specialized cells will be discussed and also those changes in structure and function which occur during reproduction and development. Emphasis is placed on the human. Reading is normally limited to suitable textbook material, however, opportunities exist for outside reading. Essays, reports, papers or drawings are not required. Criteria for entry: Third or fourth year honours, major, and pre-profession students or permission of the

Pre- or corequisites: Zoology 202 or Biology 207. Biology 303 (Zoology 303) is desirable.

Texts: Copenhaver, Bailey's Textbook of Histology; Patten, Foundations of Embryology.

F. T. Algard. (2-3; 2-3)

#### BIOL 304. (3) Biometrics

Introduction of the student to layout, analysis and interpretation of biological experiments. Introduction to probability and statistics; probability distributions, sampling methods; tests of hypotheses; analysis of variance; linear and curvilinear regression; covariance; non-parametric tests. Weekly laboratory assignments involving problems.

Prerequisites: Mathematics 102/151 or 130 or equivalent.

Texts: To be announced.

P. T. Gregory.

(2-3; 2-3)

#### BIOL 305 (formerly ZOOL 305). (3) Animal Physiology

A general survey of the physiology of animals from single-celled to human levels of organization.

The following systems will be treated: nutritional; digestive; osmoregulatory; excretory; respiratory; thermoregulatory; neuromuscular and endocrinal. In addition physiological aspects of defence, animal associations and behaviour will be studied.

Pre- or corequisites: Biology 200 or equivalent, Chemistry 230 or 233.

Texts: To be announced.

J. S. Hayward, R. G. B. Reid.

(2-3; 2-3)

#### BIOL 306. (1 1/2) Ecology

A survey of populations, communities and ecosystems. Laboratories will deal with the general methods of ecology. Biology honours and major students should take this course in conjunction with Biology 300.

Texts: To be announced.

P. T. Gregory.

September-December only. (2-3)

#### BIOL 309. (11/2) Developmental Zoology

Animal development and the mechanisms that control it. Introductory embryology of vertebrates and invertebrates will be coordinated with the analysis of developmental processes. Topics considered will include gametogenesis, fertilization, cleavage, embryogenesis, organogenesis, cellular differentiation, growth, metamorphosis, regeneration and aging.

Prerequisites: Biology 200, 206 and 207 or permission of instructor.

Texts: To be announced.

M. Paul.

September-December only. (2-3)

#### BIOL 310. (3) Elements of Oceanography

A non-technical course designed to give the general student a broad background in oceanography. Lectures will cover origin and extent of the oceans, nature of the sea bottom, causes and effects of tides, waves and currents, animal and plant life in the sea, pollution and utilization of the oceans by man. Open to all students in 2nd, 3rd and 4th years.

Biology 150 is not required for this course. Credit for this course will not be counted toward degree programmes in biology. Students planning to proceed to other courses in Oceanography must take Biology 311. Credit will not be given for both Biology 310 and 311.

Texts: Anikouchine and Sternberg, The World Ocean; Russell-Hunter, Aquatic Productivity.

Members of the Department.

(3-0; 3-0)

#### BIOL 311. (3) Introduction to Oceanography

An introduction to the concepts of physical, chemical, geological and biological oceanography. Designed for biology programmes, this course will provide a broad, comprehensive study of the open ocean. Lectures will be supplemented by laboratory experience in the techniques of modern oceanography. Participation in single day cruises is expected. This course may be taken by students with 3rd year standing or higher.

Prerequisites: Physics 101 or 103; Mathematics 151/102 or 130; Chemistry 120 or 124; Biology 203 or Botany 205; and Biology 206 or Zoology 301. Non-biology science majors wishing this course should consult with the instructor for special permission. Credit will not be given for both Biology 310 and 311.

Texts: Gross, Oceanography; Pickard, Physical Oceanography; Russell-Hunter, Aquatic Productivity.

I. L. Littlepage.

(2-3:2-3)

# BIOL 312 (formerly ZOOL 312). (11/2) Introductory Entomology

An introduction to the morphology, physiology, taxonomy and biology of insects, and some consideration of their economic importance. A term essay and a representative collection of 50 species of insects will be required before completion of the course. The specimens should be mounted, identified and presented as a museum collection. Obtain instructions before the summer preceding the course. Field collecting trips will be arranged wherever possible. Students proceeding in Entomology are advised to take this course in conjunction with Biology 313.

Pre- or corequisites: Biology 206 or Zoology 301.

Text: Borror & Delong, An Introduction to the Study of Insects.

R. A. Ring.

September-December only. (2-3)

#### BIOL 313. (11/2) Economic Entomology

A study of man's greatest competitors for food and resources. Insects and arachnids of medical, household, stored products, horticultural, agricultural and forestry importance will be discussed. The course will deal to a great extent with the variety of measures available for pest control.

Prerequisite: Biology 150 or written permission of instructor.

Texts: Assigned readings.

R. A. Ring.

September-December only. (3-0)

#### BIOL 314. (3) Natural History of Marine Invertebrates

General problems in ecology, morphology, physiology and life histories of marine invertebrates. Students will become familiar with local fauna through field trips to a variety of marine habitats and through study of living animals in the laboratory. Results of individual projects will be reported in

Prerequisite: Biology 206 or equivalent. Not open to students with credit in Biology 311 and Biology 406.

Credit will not be given for both Biology 314 and Marine Science 410.

Text: To be announced.

W. G. Fields.

(2-3; 2-3)

#### BIOL 315 (formerly BOTA/BIOL 415). (3) Introductory Mycology

Morphology and physiology of terrestrial and marine fungi. Basidiomycetes, Chytridiomycetes, Oomycetes, Zygomycetes and Myxomycetes will be treated during the first term. Ascomycetes and imperfect fungi will be treated during the second term, as well as important fungal plant diseases. Specialized isolation, culture, and cytological techniques will be presented. Readings in the current literature will supplement the text. A collection of at least 25 properly annotated genera and a research project are required for completion of the course.

Prerequisite: Botany 205 or Biology 203 or permission of instructor.

Text: Alexopolous: Introductory Mycology.

J. W. Paden.

(2-3; 2-3)

#### BIOL 316. (11/2) Environmental Issues

An interdisciplinary course broadly dealing with man in the ecosystem. Participation by non-biologists is encouraged. Through informal discussion, fie'd trips, and projects chosen by class interest, the course seeks to improve communication between disciplines on environmental issues and generally to broaden perspectives on environment-man relationships.

Requirements: active participation in discussion, participation in two 4-day weekend field trips in mid-September and November, and a project presentation. Normally not for credit towards degree programmes in Biology but may be taken as a free elective by Biology Majors. Open to students from any department with at least two years of university or comparable experience.

Text: Assigned Readings.

M. A. M. Bell.

September-December only. (3-0)

#### BIOL 318. (11/2) Taxonomy of Flowering Plants

An introduction to plant systematics with emphasis on angiosperms; principles of classification; nomenclature, identification; seminars on contemporary topics; familiarization with selected plant families of British Columbia; field trips.

NOTE: A well prepared collection of 25 properly identified plants must be submitted for completion of the course. Students are urged to make their collections during the preceding summer. Contact the instructor for details and collecting equipment as early as possible.

Prerequisite: Botany 205 or Biology 204 or written permission of the instructor.

Texts: C. L. Porter, Taxonomy of Flowering Plants; Harrington & Durrell, How to Identify Plants.

M. A. M. Bell.

September-December only. (2-3)

#### BIOL 320. (1 1/2) Genetics and Evolution

Concepts of evolution and genetics that are of particular interest to present day society. The origin of life; evolutionary forces; genetic systems; gene environment interactions; the genetics of man; genetics and man. Demonstration sessions will be arranged. Open to non-biology and general programme biology students. Biology honours and major students should register for Biology 300. Credit will not be given for both Biology 300 and Biology 320.

Prerequisites: 2nd, 3rd, or 4th year students with Biology 150 or equivalent, or written permission of instructor.

Texts: To be announced.

E. D. Styles.

September-December only. (3-0)

#### BIOL 329 (formerly ZOOL 416). (1 1/2) Biology of the Vertebrates

A course dealing mainly with the vertebrates of British Columbia and their natural histories. The island and mainland faunas of British Columbia will be considered in relation to the geographical distributions of major North American taxa. Particular reference will be made to dispersal potentials, the geological and climatic history of the area, and the evolutionary history of the various forms and their life history patterns. Laboratories will stress vertebrate systematics and identification of common native species. Field trips will be planned.

Prerequisites: Biology 207 or Zoology 202, or written permission of instructor.

Texts: To be announced.

P. T. Gregory.

January-April only. (2-3)

#### BIOL 331 (formerly BOTA 331). (3) Introductory Plant Physiology

An introduction to all phases of plant physiology. Growth and flowering, dormancy, mechanisms of ion exchange and salt accumulation, water relations, respiration and photosynthesis; synthesis of carbohydrates, fats and proteins. One research report or one seminar will be given by each student.

Pre- or corequisites: Biology 200, Botany 205 or Biology 203 and 204, or written permission of the instructor; Chemistry 230 or 233.

Text: Bidwell, Plant Physiology.

D. J. Ballantyne.

(2-3; 2-3)

#### BIOL 334. (1 1/2) Plants and Man

An introduction to economically important plants and their products, especially as sources of food, shelter, clothing, drugs and industrial raw materials. Aspects of plant growth and development, physiology, breeding and disease will be discussed for important agricultural and forest plants. Demonstrations will be arranged. Open to all students in 2nd, 3rd, and 4th

years. Biology 150 is not required for this course. Normally credit for this course will not be counted toward degree programmes in Biology, but Biology students may take this course as a free elective.

Texts: Anderson, Plants, Man and Life; Scientific American Reprints; Baker, Plants and Civilization.

D. J. Ballantyne.

September-December only. (3-0)

#### BIOL 338. (11/2) Applied Plant Physiology

Application of principles of plant physiology to problems in agriculture, forestry and air pollution. Normally, credit for this course will not be counted toward degree programmes in Biology, but Biology students may take this course as a free elective.

Prerequisites: One of Biology 150, 200, 204, or 334 or permission of instructor.

Text: Bleasdale, Plant Physiology as Related to Horticulture.

D. J. Ballantyne.

January-April only. (3-0)

## BIOL 343 (formerly BIOL 342). (1 1/2) Developmental Plant Anatomy

A study of the origin and development of cells, tissues and organs in vascular plants with special emphasis given to seed plants. The mature structures are discussed as they relate to function. Recent studies of plant ultra-structure are considered in view of development and function. (Not open to students who have credit for Biology 342 (3).)

Prerequisites: Biology 204 (Botany 205).

Text: Esau, Anatomy of Seed Plants. Alternative Texts: Cutter, Plant Anatomy Part I and Part II.

J. N. Owens.

September-December only. (2-3)

## BIOL 344 (formerly BIOL 342). (1 1/2) Plant Microtechnique

A study of the techniques used to investigate structural aspects of plant growth, development and function. Techniques covered include paraffin methods, wood sectioning, maceration, clearing, chromosome preparations, photomicrography, histo-chemistry and autoradiography. (Not open to students who have credit for Biology 342 (3).)

Prerequisites: Biology 204 (Botany 205).

Text: Johansen, Plant Microtechnique.

J. N. Owens.

January-April only. (2-3)

#### BIOL 401. (3) Application of Genetic Principles

Selection for continuous and discontinuous variation. Use of heterosis, chromosome manipulations and mutation in plant and animal breeding. Genetic basis for host-parasite relationships, disease and insect resistance. Genetic control of insects. Detection of environmental mutagens. Use of cell hybridization techniques. Genetics in medicine. Proposed methods for gene therapy. Implications of applying genetic principles to man.

Pre- or corequisite: Chemistry 230 or 233; (recommended: Biology 300).

E. D. Styles.

(Not offered 1976-77; will be offered 1977-78.)

(2-3; 2-3)

NOTE: Laboratory Modules in Biology 401 are:

1. Estimating quantitative

- inheritance
- Plant breeding techniques
- 3. Genetic control of insect populations
- 4. Use of genetic strains of microorganisms
- Medical genetics techniques

Biology 405 are:

- 1. Cellular kinetics
- 2. Electron Microscopy
- 3. Tissue culture
- 4. Microbial genetics and mutation mechanisms
- Subcellular organelle and molecular fraction techniques (ultra-centrifugation)

Students registering in both Biology 401 and 405 will be expected to complete the above 10 modules plus two additional modules, to be arranged, making a total of 12 modules.

# BIOL 403 (formerly ZOOL 403). (3) Embryology of Marine Invertebrates (formerly Embryology of Marine Organisms)

Reproductive biology and development of marine invertebrates; examination of developmental process at the cellular and molecular level coordinated with descriptive and experimental embryology. In the first term the descriptive and experimental embryology of the marine invertebrate groups

will be surveyed. The second term will include a more intensive examination of selected topics through readings in the literature and seminar presentations; topics will depend on student interests. The laboratory in the second term will consist of research projects.

Prerequisites: Biology 309 or permission of the instructor.

Credit will not be given for both Biology 403 and Marine Science 411.

Text: To be announced.

M. Paul. (2-3; 2-3)

#### BIOL 405. (3) Molecular Biology (formerly Cellular Physiology)

Structure and function of cells with particular emphasis in laboratory exercises to molecular biology. Laboratory requirements may be satisfied by completing any six of the laboratory modules offered by Biology 405 or Biology 401.

Pre- or corequisites: Biology 200; Chemistry 230 or 233; and permission of the instructor.

Texts: Lehninger, Biochemistry, The Molecular Basis of Cell Structure and Function; Access to: Watson, Molecular Biology of the Gene, 3rd Edition.

M. J. Ashwood-Smith.

(2-3; 2-3)

NOTE: Laboratory Modules in Biology 401 are:

- Estimating quantitative inheritance
- 2. Plant breeding techniques
- Genetic control of insect populations
- 4. Use of genetic strains of microorganisms
- Medical genetics techniques

Biology 405 are:

- 1. Cellular kinetics
- 2. Electron Microscopy
- 3. Tissue Culture
- Microbial genetics and mutation mechanisms
- Subcellular organelle and molecular fractionation techniques (ultracentrifugation)

Students registering in both Biology 401 and 405 will be expected to complete the above 10 modules plus two additional modules, to be arranged, making a total of 12 modules.

## BIOL 406. (3) Marine Ecology

A study of ecosystems of the marine environment with emphasis on rocky shores and sediment sea-beds. Consideration of community structure, methods of association analysis, and ecosystem processes such as productivity, biochemical cycling and energy flows.

Prerequisites: Biology 306; Zoology 301 or Biology 206. Pre- or corequisite: Biology 304. Participation in three or four field trips is required. Credit will not be given for both Biology 406 and Marine Science 430.

Text: Original and review literature.

D. V. Ellis. (2-3; 2-3)

## BIOL 408. (11/2) The Biology of Pollution

Biological concepts and methods applied to the recognition, definition and measurement of excessive environmental alteration directly or indirectly affecting world biota including man; exploration of contributions of bioscience to human perception of, and response to, the stimulus of environmental perturbation. Field and laboratory observation on organisms stressed by various levels of environmental change; one project report and attendance at seminars by visiting speakers.

Pre- or corequisites: Biology 206 (or Zoology 301) or Biology 203 (or Botany 205) or written permission of instructor.

Texts: Current Literature.

A. P. Austin. January-April. (2-3)

### BIOL 409. (3) Neurobiology

Origin and evolution of excitable systems; structure, differentiation and properties of single nerve cells: principles of neuro-physiology including receptor and effector physiology; organization of behaviour patterns. The approach is comparative with examples from both vertebrates and invertebrates. Labs include histological methods for visualizing nerves, studies on differentiation and regeneration, electrophysiological recordings and experiments in behavioural physiology.

Prerequisites: Biology 303 or 305.

G. O. Mackie. (2-3; 2-3)

## BIOL 411 (formerly BOTA 411). (3) Marine and Freshwater Algae (Phycology)

A treatment of the biology of the algae with emphasis upon the ecological, morphological, phylogenetic and economic aspects. Laboratory and field work centres upon live materials collected by class members, in the rich and varied marine and freshwater communities in our region, and involves rudiments of necessary microtechnique, photomicrography, taxonomic identification, and some experimental ecological and cultural exercises. Emphasis upon either or both marine and freshwater forms is optional in project work. Participation in field excursions to coastal and lake algal habitats is expected.

Prerequisite: Botany 205 or Biology 203.

Text: To be announced.

A. P. Austin. (2-3; 2-3)

## BIOL 412 (formerly ZOOL 412). (11/2) Advanced Entomology

A study of recent advances in the field of entomology with special emphasis on insect physiology. Students will set up and conduct many of their own experiments, and will be expected to familiarize themselves with the recent literature from leading journals of insect physiology. Both written and laboratory term reports will be required.

Prerequisite: Biology 312 (Zoology 312).

[Not open to students who have credit for Biology 412 (3).]

Text: Wigglesworth, Principles of Insect Physiology and selected readings.

R. A. Ring. January-April only. (2-3)

## BIOL 414 (formerly ZOOL 414). (3) Marine Invertebrate Zoology

Selected topics are dealt with in depth in the lectures. The emphasis is on recent research in areas having unusual zoological interest. Practical work stresses individual research projects.

Pre- or corequisites: Biology 301 or Biology 314.

Texts: For general reference, a good modern textbook of Invertebrate Zoology.

G. O. Mackie. (2-3; 2-3)

## BIOL 417 (formerly ZOOL 417). (11/2) Zoological Microtechnique

Lectures and laboratories in the principles and practice of zoological microtechnique, including photomicrography, limited treatment of selected histochemical procedures and advanced microscopic techniques. Students will prepare microscope slides and photomicrographs for evaluation.

Prerequisite: Biology 200. Corequisite: Biology 302 (Zoology 302).

Text: To be announced.

A. R. Fontaine.

September-December only. (1-4)

#### BIOL 418 (formerly BOTA 418). (11/2) Plant Ecology

A study of plant communities in the context of ecosystems; vegetation structure, composition, productivity, succession; soils, climate; group projects; seminars; weekend field trips. A one-week field trip to some part of mainland British Columbia or Washington may be held in the last week of April.

Pre- or corequisites: Biology 318 (Botany 318) and Biology 306, or written permission of instructor.

Texts: Mueller-Dombois and Ellenberg, Aims and Methods of Vegetation Ecology.

M. A. M. Bell.

January-April only. (2-3)

## BIOL 419 (formerly ZOOL 419). (11/2) Comparative Histology

Lectures and laboratories designed to show the progressive elaboration of cellular and tissue structure in animal phylogeny. Students will prepare their own microscopic material. A research-type project is assigned involving substantial reading of original literature.

Prerequisite: Biology 417 (Zoology 417); Biology 302 (Zoology 302) advised as a pre- or corequisite.

Texts: To be announced.

A. R. Fontaine.

January-April only. (2-3)

### BIOL 420. (1 1/2) Applied Vegetation Science

The applications of vegetation study to land planning and management, to environmental impact assessment, to landscape rehabilitation and soil stabilization; ecology of vegetation on disturbed landscapes; human influences on vegetation pattern; use of living plants in civil engineering works.

Examples will be studied in forestry, park, and water management, regional planning, mining and quarrying reclamation, highway construction, hydroelectric development, harbour and shoreline development. The course will be field trip, project and discussion oriented with guest speakers from government and private agencies.

Pre- or corequisites: Biology 306 and Biology 418, or written permission of the instructor.

Text: To be announced.

M. A. M. Bell.

January-April only. (2-3)

#### BIOL 423 (formerly BOTA 423). (1 1/2) Plant Metabolism

An advanced discussion of (1) biochemical pathways for carbon and nitrogen metabolism and mechanisms for regulation of these pathways, emphasizing laboratory studies with algal cells, and (2) regulation of metabolism by temperature, salinity, drought, and air pollutants, emphasizing laboratory studies with tissue slices, chloroplasts, and mitochondria isolated from vascular plants.

Prerequisite: Biology 331 (Botany 331) or permission of instructor.

Text: Goodwin and Mercer, Introduction to Plant Biochemistry.

L. A. Hobson

(Not offered 1976-77; will be offered 1977-78.)

January-April only. (2-3)

#### BIOL 424. (11/2) Biological Ultrastructure

Cell and tissue structure as revealed by the electron microscope and interpreted in functional terms. Lectures, reading assignments and at least one seminar presentation per student.

Prerequisites: Biology 200; Biology 343 (Botany 342) or Biology 302 (Zoology 302).

Texts: Assigned Readings.

G. O. Mackie.

January-April only. (3-0)

#### BIOL 425 (formerly ZOOL 425). (3) Environmental Physiology

The adaptations of animals to temperature, light, ionizing radiations, gases, pressure, the chemical environment, etc. The aim of the course is to develop a comprehensive picture of the biokinetic zone and the spectrum of physiological mechanisms by means of which life is possible within this zone. Laboratory work consists of 3 or 4 directed research projects, reports written in scientific format and seminar presentation of reports.

Pre- or corequisites: Biology 303 (Zoology 303) or 305.

Texts: To be announced.

J. S. Hayward.

(2-3; 2-3)

#### BIOL 426. (3) Limnology

Biological study of fresh water systems. Lectures, seminars, field and laboratory work.

Prerequisite: Biology 306.

Texts: To be announced.

E. M. Hagmeier.

(2-3; 2-3)

#### BIOL 427. (1 1/2) Population Ecology

The first part of the course will deal with techniques used in assessing quantitative characteristics of animal populations such as spatial distribution, size, survivorship, and recruitment. The second part will be concerned with theories related to growth, fluctuation, and regulation of animal numbers, life history strategies, and population interactions. Considerable reading and active participation in seminars are required. Laboratories will consist of a short series of exercises using relevant quantitative methods plus directed research projects.

Prerequisite: Biology 306 or permission of instructor. Biology 304 recommended.

Texts: To be announced.

P. T. Gregory.

September-December only. (2-3)

### BIOL 428 (formerly ZOOL 428). (1 1/2) Zoogeography

The patterns of animal distributions with particular emphasis on the mechanisms and causes underlying observed distributions. Those registered will be expected to do considerable outside reading, and to participate in seminars.

Prerequisite: Biology 306.

Texts: To be announced.

E. M. Hagmeier.

September-December only. (2-3)

#### BIOL 429. (11/2) Wildlife Management

Biological principles in conservation and management of economically important birds and mammals. Laboratories will stress analysis of food habits, sex and age determination, censuses, trapping and banding, planting food and cover, habitat mapping and specimen preparation.

Prerequisite: Biology 329.

Text: To be announced.

A. C. Brooks.

January-April only. (2-3)

#### BIOL 431 (formerly ZOOL 431). (3) Ichthyology

Selected topics on the morphological, physiological and behavioural adaptations of fishes. Laboratory work consists of three or four directed research projects, reports written in scientific format and seminar presentation of results.

Prerequisites: Zoology 202 or Biology 207. Biology 303 or 305 (Zoology 303 or 305) recommended. Credit will not be given for both Biology 431 and Marine Science 412.

Text: Marshall, The Life of Fishes.

(2-3; 2-3)

#### BIOL 432 (formerly ZOOL 432). (11/2) Parasitology

Study of the biology and taxonomy of parasitic organisms.

Prerequisite: Zoology 301 or Biology 206. Not open to students who have credit in Zoology 432 (3).

Texts: To be announced.

January-April only. (2-3)

### BIOL 433 (formerly ZOOL 433). (3) Experimental Morphogenesis

Seminars, directed reading, discussion and lectures in the analysis of embryonic development by experimental methods, including differentiation of cells and tissues and their integration during morphogenesis. Outside reading, collation of relevant literature and synthesis of information for presentation in seminars is mandatory.

Pre- or corequisites: Biology 302 (Zoology 302); Biology 303 or 305 (Zoology 303 or 305). Students should consult with the instructor before registration.

Texts: Assigned readings.

F. T. Algard.

(1-4; 1-4)

## BIOL 440. (1 1/2) Quantitative Ecology

The use of simple mathematics of simulation in ecological work.

Prerequisites: Biology 306. Recommended: Computing Science 170 taken previously or concurrently. The course constitutes a logical continuation of Biology 427 (Population Ecology) though the latter is not a prerequisite.

Texts: To be announced.

E. M. Hagmeier.

January-April only. (2-3)

#### BIOL 443. (1 1/2) Biology of Conifers

A study of the biology of conifers with special emphasis given to the taxonomy, distribution, economic importance, reproduction, growth and development of native species. Certain aspects of tree improvement and genetics of some of the more important species will be considered. Several field trips will be made, some involving collection and identification of specimens.

Prerequisite: Biology 204.

Text: Selected references.

J. N. Owens.

(Not offered 1976-77; will be offered 1977-78.)

(2-3)

#### BIOL 444. (11/2) Animal Behaviour I

Study of the range and function of animal behaviour, with an introduction to causative physiological mechanisms and consideration of human analogies. Participation in field work is required. The course is given in association with Psychology 434, Animal Behaviour, and students may not register for both.

Text: To be announced.

D. V. Ellis.

September-December only. (3-1)

#### BIOL 445. (11/2) Animal Behaviour II

Study of the phylogeny, functions and causation of animal behaviour from both field-descriptive and laboratory-experimental points of view. The course is designed for professional biologists in training, and normally should not be taken before the fourth year in order that corequisite background in physiology, ecology and biometrics can be obtained. The course is given in association with Psychology 434, Animal Behaviour, and students may not register for both.

Prerequisites: Biology 444 and Psychology 100. Students wishing to register in this course should consult with the instructor prior to registration.

Texts: To be announced. Original and review literature.

D. V. Ellis.

January-April only. (2-2)

#### BIOL 450. (11/2) Oceanography — Phytoplankton

Aspects of the physical and chemical properties of seawater; the theory of the distribution of variables, and the water masses and currents of the oceans that influence growth of phytoplankton. The effects of light, temperature, inorganic and organic micronutrients, bacteria, and zooplankton on primary productivity will be discussed as they affect seasonal succession and geographic distributions of phytoplankton. Students will be responsible for one essay based on library research of a problem of current interest in phytoplankton ecology.

Prerequisite: Biology 311 or written permission of instructor.

Text: Parsons and Taka hashi, Biological Oceanographic Processes.

J. L. Littlepage.

September-December only. (2-3)

#### BIOL 451. (11/2) Oceanography - Zooplankton

Ecology and physiology of marine zooplankton. Lectures and seminars dealing with reproduction, vertical distribution and migration, feeding, assimilation and respiration of neritic and oceanic zooplankton. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research problem. Participation in research cruises is expected.

Prerequisite: Biology 311 or written permission of the instructor. Suggested corequisite: Biology 450.

Text: Raymont, Plankton and Productivity in the Ocean.

J. L. Littlepage.

January-April only. (2-3)

#### BIOL 452. (11/2) Algal Nutrition and Metabolism

Lectures and laboratory studies including uptake and metabolism of carbon, nitrogen, phosphorus, silicon, and organic and inorganic micronutrients by algae. Students will be responsible for one essay based on library research of a problem of current interest in algal physiology and biochemistry.

Prerequisites: Biology 203 or Botany 205 and Biology 331 (Botany 331) or written permission of instructor.

L. A. Hobson.

(Not offered 1976-77.)

January-April only. (2-3)

#### BIOL 453. (11/2) Stress Physiology of Plants

An advanced study of the physiological responses of plants to temperature extremes, drought, salinity, radiation stress and air pollution.

Prerequisites: Biology 331 or permission of instructor.

Text: Treshow, Environment and Plant Response.

D. J. Ballantyne.

January-April only. (3-0)

#### BIOL 460. (1) Honours Seminar

Participation in seminars as arranged by the Department and the Honours Co-ordinator. Required of all Honours students in their fourth year of studies, as an addition to the normal 15 units. (Grading: COM, N, or F.)

M. Paul.

#### BIOL 490. (1-3) Directed Studies in Biology

Students must obtain the written consent of the Department before registering for this course.

#### BIOL 499. (3) Thesis or Tutorial

#### MARINE SCIENCE

A number of Marine Science courses are offered at the Bamfield Marine Station in Summer Session only at present. These courses may supplement or substitute for courses listed above in the normal biology programmes. Students should obtain the permission of the Department before taking one of the Marine Science courses.

#### MRNE 400. (3) Directed Studies

A course of directed studies under the supervision of a member of faculty. The study will involve a research project approved by the supervisor in the field of interest of the student, and will be designed to take maximum advantage of the laboratory and/or field opportunities offered by the Bamfield Marine Station.

Offered in Summer Session only, as announced.

#### MRNE 401. (3) Special Topics in Marine Biology

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station. It is expected that the course will generally be of a specialized nature and be at a level appropriate to graduate or senior undergraduate students.

Offered in Summer Session only, as announced.

#### MRNE 402. (1 1/2) Special Topics in Marine Biology

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station and are prepared to offer a course extending over a three-week period. This course will be of a specialized nature.

Offered in Summer Session only, as announced.

#### MRNE 410. (3) Marine Invertebrate Zoology

A survey of the marine phyla, with emphasis on the benthic fauna in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field. NOTE: Credit will not be given to both Marine Science 410 and Biology 314.

Offered in Summer Session only, as announced.

## MRNE 411. (3) Comparative Invertebrate Embryology

A comprehensive study of development of marine invertebrates available at the Bamfield Marine Station, including all major phyla and most of the minor phyla. A total of 25 or 30 lectures, covering gametogenesis, fertilization, larval development and metamorphosis of different groups will be given. Laboratory work will include methods and techniques of obtaining and handling of gametes, preparation and maintenance of larval cultures, and observations up to metamorphosis if possible. Some selected and clearly defined experiments will be performed. Efforts will be made also to study various pelagic larvae collected from the plankton.

It is hoped that such a broad approach, as outlined above, will provide the student with fundamental frameworks and insights for analytical studies on one hand, and for reproductive ecology on the other hand. Credit will not be given for both Marine Science 411 and Biology 403.

Offered in Summer Session only, as announced.

## MRNE 412. (3) Biology of Fishes

Classification, physiology, ecology, behaviour and zoogeography of fishes with particular emphasis on those in the marine environment of the British Columbia coast. This course will involve some field projects. Credit will not be given for both Marine Science 412 and Biology 431.

Offered in Summer Session only, as announced.

#### MRNE 420. (3) Marine Phycology

A survey of the marine algae, with emphasis on the benthic forms in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

Offered in Summer Session only, as announced.

#### MRNE 430. (3) Marine Ecology

An analytical approach to biotic associations in the marine environment. Opportunities will be provided for study of the intertidal realm in exposed and protected areas and of beaches and estuaries in the vicinity of the Bamfield Marine Station; plankton studies and investigations of the subtidal and benthic environments by diving and dredging are envisaged.

NOTE: Credit will not be given for both Marine Science 430 and Biology 406.

Offered in Summer Session only, as announced.

#### MRNE 435. (3) Introduction to Biological Oceanography

An introduction to the biology of the oceans, with supporting coverage of relevant physics and chemistry. Emphasis will be placed on plankton biology, community structure and life histories, and influencing environmental factors. Collections will be made from sheltered inlets, through Barkley Sound to offshore waters. The course will involve both field and laboratory studies of plankton organisms.

Offered in Summer Session only, as announced.

#### **GRADUATE COURSES**

Biology 511 and 527 will be offered every year. Students should consult the Department concerning which other courses will be offered in any particular year. All students are expected to register for Biology 560 (seminar).

Admission to any graduate course requires prior permission of the Instructor.

#### BIOL 500. (1) Selected Topics in the History and Philosophy of Biology

All graduate students are expected to participate in this course each year for a maximum of 3 years.

#### BIOL 501T. (3) Concepts in Modern Biology for Science Teachers

Students wishing to take this course should consult with the Department of Biology in March of the previous academic year.

## BIOL 510. (3) Advanced Topics in Ichthyology

J. E. McInerney.

#### BIOL 511. (3) Marine Science Seminar

Selected topics in marine biology will be dealt with in depth.

A. P. Austin and members of the department.

## BIOL 512. (3) Advanced Marine Ecology

D. V. Ellis.

#### BIOL 513. (3) Topics in Vertebrate Anatomy and Embryology

F. T. Algard.

#### BIOL 514. (3) Zooplankton Ecology

J. L. Littlepage.

## BIOL 515. (3) Physiology of Marine Animals

R. G. B. Reid

## BIOL 517. (3) Oceanography II

J. L. Littlepage.

## BIOL 519. (1-3) Animal Ecology

## BIOL 520. (3) Advanced Mycology

J. W. Paden.

#### BIOL 521. (3) Advanced Phycology

A. P. Austin.

## BIOL 522. (1-3) Advanced Plant Ecology

M. A. Bell.

#### BIOL 523. (2) Advanced Plant Physiology

D. J. Ballantyne.

#### BIOL 524. (1-3) Plant Anatomy and Morphology

J. N. Owens.

## BIOL 525. (3) Recent Advances in Insect Physiology

R. A. Ring.

## BIOL 526. (11/2) Topics in Biological Ultrastructure

G. O. Mackie.

#### BIOL 527. (1-3) Advanced Topics in Cell Biology

Seminars, discussions and laboratory work associated with recent advances in cell biology. Topics will include: quantitative tissue culture; bacterial and mammalian cell mutations; use of isotopes in biology; basic methods of cell separation; subcellular and molecular separations and ultracentrifuga-

Text: Research paper and reviews.

M. J. Ashwood-Smith.

## BIOL 528. (1-3) Topics in Advanced Invertebrate Zoology

Members of the Department.

BIOL 529. (1-3) Advanced Parisitology

## BIOL 530. (2) Recent Advances in Genetics

E. D. Styles.

## BIOL 531. (11/2) Selected Topics in Vertebrate Physiology

J. S. Hayward.

#### BIOL 532. (3) Advanced Techniques in Cell Biology

M. J. Ashwood-Smith.

## BIOL 533. (3) Advanced Topics in Embryology of Marine Invertebrates M. Paul.

## BIOL 534. (1-3) Problems in Environmental Management

M. A. Bell.

## BIOL 535. (1-3) Advanced Topics in Zoogeography

E. M. Hagmeier.

## BIOL 536. (1-3) Advanced Topics in Ecology

E. M. Hagmeier.

#### BIOL 550. (1-6) Directed Studies

## BIOL 560. (1) Seminar

Participation in a programme of seminars. Required of all graduate students every year of their degree programme as an addition to the normal 15 units. Shall be treated, in its grading, as the thesis or the dissertation and shall be given one unit of credit upon completion. (Grading: INC or COM.)

BIOL 599. (credit to be determined) Thesis

BIOL 699. (credit to be determined) Ph.D. Dissertation

## DEPARTMENT OF CHEMISTRY

#### Alexander D. Kirk, B.Sc., Ph.D. (Edinburgh), Professor, and Chairman of the Department.

- Graham R. Branton, B.Sc., Ph.D. (Southampton), Associate Professor and Acting Chairman of the Department to 30 June 1976. (On study leave 1976-77.)
- Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z), Professor.
- D. J. MacLaurin, B.A.Sc. (Brit. Col.), M.S., Ph.D. (Lawrence), P.Eng., Professor Emeritus.
- Alexander McAuley, B.Sc., Ph.D. (Glasgow), A.R.I.C., Professor.
- Robert N. O'Brien, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (Manchester), Professor.
- Stephen A. Ryce, B.A., Ph.D. (Brit. Col.), Professor.
- Walter J. Balfour, B.Sc. (Aberdeen), Ph.D. (McMaster), Associate Professor.
- Colin N. Banwell, M.A., Ph.D. (Cantab.), Visiting Associate Professor (1975-76).
- Gordon W. Bushnell, M.A., B.Sc. (Oxon.), Ph.D. (West Indies), Associate Professor.
- Keith R. Dixon, B.A. (Cantab.), Ph.D. (Strathclyde), Associate Professor.
- Wilma E. Elias, B.A., M.A. (Sask.), Ph.D. (Brit. Col.), Associate Professor.
- Sidney G. Gibbins, B.S. (Cal. Inst. Tech.), Ph.D. (Wash.), Associate Professor.
- Martin B. Hocking, B.Sc. (Alta.), Ph.D. (Southampton), Associate Professor.
- Reginald H. Mitchell, B.A., M.A., Ph.D. (Cantab.), Associate Professor.
- Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), Associate Professor.
- John M. Vernon, B.A., M.A., D.Phil. (Oxon.), Visiting Associate Professor (1975-76).
- Paul R. West, B.Sc., Ph.D. (McMaster), Associate Professor.
- Donald C. Wigfield, B.Sc. (Birmingham), Ph.D. (Tor.), Visiting Associate Professor (1975-76).
- Thomas W. Dingle, B.Sc., Ph.D. (Alta.), Assistant Professor.
- Gerald A. Poulton, B.A., Ph.D. (Sask.), Assistant Professor.
- Stephen R. Stobart, B.Sc., Ph.D. (Nottingham), Assistant Professor.
- Hugh M. Cartwright, B.Sc., Ph.D. (E. Anglia), Sessional Lecturer (1975-76).
- Terrance K. Davies, B.Sc. (U. of Vic.), Senior Scientific Assistant.
- Karel Hartman, L.I.R.I., B.Sc. (U. of Vic.), Senior Laboratory Instructor. L. Blair Humphrey, B.Sc., M.Sc. (Brit. Col.), Senior Laboratory Instructor.
- John F. Reeves, C.D., Administrative Assistant.

## **GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 145; for graduate courses, see page 43.

#### GENERAL, MAJOR AND HONOURS PROGRAMMES

The Department offers Honours and Major programmes, leading to the B.Sc. degree, which provide opportunity for specialized education in chemistry. The Honours programme requires 34 units of chemistry courses from the total 61 units for the degree. The Major programme requires 24 units of chemistry courses. Each programme requires 6 units in mathematics and 6 units in physics of corequisite courses.

Students seeking careers as professional chemists or those who wish to continue their studies through graduate school to the M.Sc. and Ph.D. level are advised to take the Honours programme. The Major programme may also provide entry to graduate school and thus to careers for which a Master's or Doctoral degree is required. It is also suitable for students who seek careers in industrial laboratories and in teaching at the secondary level.

The Department also offers a concentration in chemistry as part of the B.Sc. degree and B.A. degree General programmes. A General programme with a concentration in chemistry is suitable for students seeking careers in industry, business, teaching and other occupations. Chemistry courses which may be included in programmes leading to a B.A. or B.Sc. degree in other disciplines are also provided.

## COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMMES

GENERAL		MAJOR		HONOURS	
First Year					
Chem 124	(3)	Chem 124	(3)	Chem 124	(3)
Math 130	(3)	Math 130	(3)	Math 130	(3)
Phys 101 or 121	(3)	Phys 101 or 121	(3)	Phys 101 or 121	(3)
Other courses	(6)	Other courses	(6)	Other courses	(6)
Second Year				i .	
Chem 224	(3)	Chem 224	(3)	Chem 224	(3)
Chem 233	(3)	Chem 233	(3)	Chem 233	(3)
Either Math 231	(3)	Math 231	(3)	Math 231	(3)
or Math 230	, ,	Phys 212	(3)	Phys 212	(3)
and 232	(6)	(recommended)	, ,	(recommended)	(-)
Other courses (3 o	r 6)	or Phys 213	(3)	or Phys 213	(3)
		or Biol 200	(3)	or Biol 200	(3)
		or Math 230 and 232	(6)*	or Math 230 and 232	(6)
		or Other	(3)	or Other	(3)
		(Biochemistry,	(-)	(Biochemistry,	(-)
		Physics or		Physics or	
		Mathematics		Mathematics	
		course with permission of		course with permission of	
		department.)		department.)	
		Other courses	(3)	Other courses	(3)
		(may include	(-)	(may include	(-)
		options not use above)	d	options not use above)	ed
Third and Fourth Yea	ars			Third Year	
Nine additional un	its	Chem 314	(3)	Chem 314	(3)
of chemistry in	103	Chem 326	(3)	Chem 326	(3)
courses numbered	d	Chem 333	(3)	Chem 333	(3)
above 300 for		Chem 344	(3)	Chem 344	(3)
which the required		Chem 344	(3)	Chem 399	
prerequisites					(1)
have been				Other courses	(3)
taken	(9)				
				Fourth Year	
Nine units in a		Any two of Chem	i	Chem 422	
second area of	(0)	422, 423, 433,	(0)	and 423	(3)
concentration	(9)	434, 444, 446	(3)	Chem 433	(0)
Other courses (	12)	Other courses	(15)	and 434	(3)
				Chem 444 and 446	(3)
					-
				Chem 499 Other courses	(3)

<sup>\*</sup> If this option is chosen, Math 231 may not be taken.

- NOTES: 1. Courses may be taken in different sequences and in different years than those indicated provided that the co- and prerequisite requirements are satisfied.
- 2. Students considering graduate work in chemistry are advised to acquire a reading knowledge of at least one of French, German or Russian.
- 3. Students with a D grade in any course in chemistry are advised not to register for a following course in chemistry and may not do so without written permission of the Department. A supplemental examination may be written to improve the course grade (see page 15).
- 4. Students registering for any chemistry course which includes laboratory work are required to purchase a Chemistry Laboratory Credit Card (\$6.00) immediately following registration. Any unused portion of this credit is refundable. Glasses or face shields must be worn by all students in laboratories. These are available in the Department. Chemistry Department laboratory notebooks may be purchased in the University Bookstore. UVic laboratory manuals may be obtained through Chemistry Stores.

#### **HONOURS**

The general requirements for admission to the Third Year of an Honours Programme are specified in the column to the left. Permission of the Department is required for admission into each of the Third and Fourth Years of the Chemistry Honours programme. For this, the Department is to be consulted, by interview or by letter, no later than one month before the last day for submission of applications for admission or re-admission to the University. The minimum requirement for admission to the Fourth Year is a second class average in all the work of the Third Year and also in the required courses of the Third Year Chemistry Honours Programme. Honours students are advised to include an additional mathematics course among their electives. Suitable courses are Computing Science 170, 171, and Mathematics 323, 330.

A student in the Chemistry Honours Programme is required to attain a 6.5 graduating average in order to obtain a first class Honours Degree. A first class Honours student is also normally expected to obtain a first class standing in Chemistry 499 (Honours Thesis), and at least a second class standing in all of the required fourth year chemistry courses. To obtain a second class Honours Degree a student is required to obtain at least a 4.0 graduating average. Failure to obtain at least a grade of B in Chemistry 499 will result in the awarding of a Major Degree. A D grade in any of the required fourth year chemistry courses will normally result in the

awarding of a Major degree.

#### **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

For students whose major field lies outside the physical and biological sciences the chemistry course which is particularly suitable as an elective is Chemistry 120 (General Chemistry). Students should also note the availability of Liberal Arts 305 (page 76).

#### CHEM 120. (3) General Chemistry

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, and states of matter. Basic physical chemistry. Periodic, organic, surface and nuclear chemistry. This course includes a laboratory illustrating the properties of chemical systems.

Credit will not be given for both Chemistry 120 and 124.

Prerequisites: Chemistry 11; Mathematics 12 is also strongly recommended. Students desiring to registrar in Chemistry 120, but who do not have the chemistry prerequisite, should consult the Department prior to registration. When permission to enter Chemistry 120 is granted, then registration will be in Lecture Section number 1, which has four lectures per week.

Texts: Murphy & Rousseau, Foundations of College Chemistry (1969); Chemistry 120 Laboratory Manual (1976).

W. E. Elias, S. G. Gibbins, F. P. Robinson.

NOTE: Chemistry 120 provides a comprehensive course in General Chemistry at the First Year University level, and is suitable for all fields and programmes at this University, except those which include either Chemistry 224 or 233. Certain pre-professional programmes require Chemistry 124 (see page 164).

## CHEM 124. (3) Introductory Physical and Inorganic Chemistry — Part I

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter, and nuclear chemistry. Basic physical chemistry including thermochemistry, thermodynamics, chemical kinetics, and equilibrium in chemical systems. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation.

Prerequisites: Mathematics 12 and Chemistry 12 or their equivalents. Students desiring to register in Chemistry 124, but who do not have these prerequisites, should consult the Department prior to registration for permission to register. If permission to enter Chemistry 124 is granted to a student who lacks Chemistry 12, then registration will be in Lecture Section number 1 which has four lectures per week.

Texts: Mortimer, Chemistry, A Conceptual Approach (3rd Ed.); Chemistry 124 Laboratory Manual (1976).

W. J. Balfour, G. W. Bushnell, S. G. Gibbins, A. McAuley, R. N. O'Brien. (3-3;3-3)

NOTE: Chemistry 124 is the first part of a Chemistry 124-224 sequence and is an essential first course for students planning a programme in chemistry.

#### CHEM 224. (3) Introductory Physical and Inorganic Chemistry — Part II

Introduction to spectroscopy. Chemistry of the main group elements. Quantitative inorganic analysis. Emphasis will be placed on the application of the principles of physical chemistry introduced in Part I. This course includes experimental laboratory applications of solution equilibria, acidbase and redox theory in chemical analysis.

Prerequisite: Chemistry 124 (or 120 with permission of the Department).

Texts: Dasent, Inorganic Energetics; Massey, The Typical Elements or Cotton & Wilkinson, Advanced Inorganic Chemistry, Chemistry 224 Laboratory Manual (1976). All students are strongly advised to retain copies of their first year texts.

K. R. Dixon, S. R. Stobart.

(3-4; 3-4)

#### CHEM 230. (3) General Organic Chemistry

Fundamental principles of organic chemistry and descriptive chemistry of the main classes of organic compounds with special emphasis on the structure and reaction of biologically important compounds. This course includes a laboratory illustrating the basic operations and representative reactions and preparations of organic chemistry.

This course is designed for students preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry, and Nursing (see page 164). Credit will not be given for both Chemistry 230 and 233.

Prerequisite: Chemistry 120 or 124.

Texts: To be announced; Chemistry 230 Laboratory Manual (1976).

W. E. Elias, G. A. Poulton, P. R. West.

(3-3:3-3)

### CHEM 233. (3) Organic Chemistry — Part I

An introduction to theoretical, physical and descriptive organic chemistry as exemplified by a study of the properties of aliphatic, alicyclic and simple aromatic compounds. Introductory spectroscopy. This course includes a laboratory illustrating the basic operations and representative reactions and preparations of organic chemistry.

This course is designed for students planning to take the Chemistry 233-

333 sequence. Students who do not plan to take Chemistry 333 are advised to take Chemistry 230. Credit will not be given for both Chem 230 and 233.

Prerequisite: Chemistry 124 or 120.

Texts: Morrison and Boyd, Organic Chemistry; Chemistry 233 Laboratory Manual (1976).

R. H. Mitchell, F. P. Robinson.

(3-3; 3-3)

#### CHEM 300. (3) Chemistry in Modern Society

This course is intended for non-scientists, and will consist of lectures, demonstrations, class experiments and discussions.

The course is designed to show the relevance of chemistry to modern life by examination of such topics as drugs, agricultural and military chemicals, energy and petroleum, plastics, soaps and detergents, food, air and water pollution.

Students will be encouraged to keep abreast of controversial chemical issues by discussions which will place emphasis on the correct application of the scientific facts as opposed to misleading applications or speculations.

A detailed syllabus is available from the department.

Prerequisite: Successful completion of at least 15 units of university credit. This course may be appropriate for students who have taken a first year chemistry course, but who do not plan on taking further courses in chemistry. Credit may not be obtained for both Chemistry 300 and any other Chemistry course numbered 200 and above.

R. H. Mitchell. (3-0; 3-0)

## CHEM 301. (3) Industrial Processes and the Chemistry of Pollution

Chemical principles used in the mining and smelting, heavy chemical, and petroleum refining industries and in the manufacture of pulp and paper, petro-chemicals, soap and detergents, and polymers. Problems and methods for waste control, by-product utilization, and waste disposal into soil, water or air. The course is intended for students who wish to become familiar with important industrial processes and with the chemical aspects of environmental quality.

Prerequisite: Chemistry 120 or 124.

Text: Shreve, Chemical Process Industries.

M. B. Hocking. (3-0; 3-0)

#### CHEM 310. (11/2) Chemical Instrumentation for Environmental Sciences

This course is intended for students in sciences other than chemistry who have a need to make use of chemical instrumentation. It will present the principles of modern instrumental techniques and illustrate their applications to the study of environmental problems, particularly in the monitoring and control of chemical species in the biosphere. Techniques to be studied will include chromatography, spectrophotometry, mass spectroscopy and radiochemical, electrochemical and thermogravimetric analysis. Credit will not be given for both Chemistry 310 and 314. Chemistry 310 will not be open for credit for a Major or Honours in Chemistry.

Prerequisite: Any 200 level course in chemistry.

Text: Willard, Merritt and Dean, Instrumental Methods of Analysis (5th Ed.).

January-April only. (3-3)

#### CHEM 314. (3) Instrumental Analysis

Theory and applications of chemical instrumentation including chromatography, spectroscopy, mass spectroscopy, radiochemical, electrochemical and diffraction methods.

Prerequisites: Chemistry 224 or at least a grade of B minus in Chemistry 230 or 233, and permission of the Department.

Text: Willard, Merritt and Dean, Instrumental Methods of Analysis (5th Ed.); Chemistry 314 Laboratory Manual (1976).

A. D. Kirk. (2-4; 2-4)

#### CHEM 326. (3) Inorganic Chemistry

Applications of molecular orbital and crystal field methods to coordination compounds. Chemistry of the transition elements.

Prerequisites: Chemistry 224, Mathematics 231 or 230 and 232.

Texts: Cotton and Wilkinson, Advanced Inorganic Chemistry; Chemistry 326 Laboratory Manual (1976).

K. R. Dixon, S. R. Stobart. (3-3; 3-3)

## CHEM 333. (3) Organic Chemistry — Part II

Aromatic chemistry, polyfunctional organic compounds, introductory heterocyclic chemistry, natural products. Reaction mechanisms and spectroscopic properties of each class of compounds studied are included. Not open to students who have credit in Chemistry 331 and 334.

Prerequisite: Chemistry 233 (or 230 with permission of the Department).

Texts: Morrison and Boyd, Organic Chemistry; Williams & Fleming, Spectroscopy Methods in Organic Chemistry (2nd ed.); Chemistry 333 Laboratory Manual (1976).

G. A. Poulton. (3-3; 3-3)

## CHEM 336. (1 1/2) Introductory Polymer Chemistry

Principles and practice of polymerization, copolymerization and basic polymer kinetics. Structure property relationships for typical organic polymer groups. Polymer technology. The laboratory is designed to acquaint students with procedures for polymer identification, polymerization/depolymerization processes, determination of physical properties, and simple fabrication.

Prerequisite: Chemistry 230 or 233.

Text: To be announced.

M. B. Hocking. September-December only. (3-3)

#### CHEM 340T. (3) Chemistry for Science Teachers

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only.

Selected topics in organic and inorganic chemistry. Modern aspects of atomic structure and chemical bonding. Thermodynamics of chemical equilibrium; chemical kinetics and electrochemistry.

Prerequisites: At least 3 units of university level chemistry and permission of the department. Students wishing to enter this course may be required to complete selected reading and study assignments prior to the course.

Ten hours of lectures and nine hours of laboratories per week. Summer Session only.

#### CHEM 344. (3) Physical Chemistry

Kinetic theory of gases, introductory quantum mechanics, thermodynamics, chemical kinetics, phase equilibria, solutions, and electrochemistry.

Prerequisites: Chemistry 224, Mathematics 231 or 230 and 232.

Texts: Barrow, Physical Chemistry (3rd ed.); Chemistry 344 Laboratory Manual (1976).

W. J. Balfour, R. N. O'Brien.

(3-3:3-3)

#### CHEM 399. (1) Research Participation and Seminar

Introduction to departmental research. Seminar report. For Chemistry Honours students only. (Grading: COM, N or F.)

F. P. Robinson and members of the Department.

(0-0-2;0-0-2)

#### CHEM 422. (11/2) Structural and Theoretical Inorganic Chemistry

A general survey of the chemistry of the solid state. Application of ligand field theory to the spectroscopy and magnetic properties of coordination compounds. Not open to students who have credit for Chemistry 424.

Prerequisite: Chemistry 326.

Texts: To be announced. Chemistry 422 Laboratory Manual (1976).

G. W. Bushnell, S. R. Stobart.

January-April only. (3-3)

## CHEM 423. (1 ½) Complex Inorganic Compounds and Organometallic Chemistry

The chemistry of transition metal carbonyls and related complexes. The chemistry of compounds containing organic groups directly bonded to metals or metalloids. Hydrides, clusters and electron deficient bonding. Not open to students who have credit for Chemistry 424.

Prerequisite: Chemistry 326.

Texts: Coates, Green, Powell and Wade, Principles of Organometallic Chemistry; Cotton and Wilkinson, Advanced Inorganic Chemistry; Chemistry 423 Laboratory Manual (1976).

S. G. Gibbins, A. McAuley.

September-December only. (3-3)

## CHEM 433. (1 ½) Organic Structure Determination. The Chemistry of Natural Products

Elucidation of the structures of organic compounds from spectral information. The chemistry of several classes of natural products, including examples demonstrating structural elucidation, synthesis, and biogenesis. Not open to students who have credit for Chemistry 435.

Prerequisite: Chemistry 333.

Texts: Williams and Fleming, Spectroscopic Methods in Organic Chemistry, 2nd ed.; Hendrickson, The Molecules of Nature; Chemistry 433 Laboratory Manual (1976). September-December only. (3-3)

## CHEM 434. (11/2) Physical Organic Chemistry

Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity. Not open to students who have credit for Chemistry 435.

Prerequisite: Chemistry 333.

Texts: To be announced; Chemistry 434 Laboratory Manual (1976).

P. R. West.

January-April only. (3-3)

#### CHEM 444. (11/2) Chemical Kinetics and Surface Chemistry

Mathematical treatment of chemical processes; theories of reaction and their application to solution and gas phase reactions. Theory of electrolyte solutions, electrode kinetics. Thermodynamics and phenomenology of surfaces, heterogenous catalysis. Colloidal systems. Not open to students who have credit in Chemistry 445.

Prerequisite: Chemistry 344.

Text: Chemistry 444 Laboratory Manual (1976).

T. W. Dingle, R. N. O'Brien.

January-April only. (3-3)

## CHEM 446. (1 1/2) Quantum Chemistry

The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semi-empirical methods. Molecular spectroscopy and symmetry. Not open to students who have credit in Chemistry 445.

Prerequisites: Chemistry 326 and 344; Computing Science 170 or Mathematics 232 are strongly recommended.

Texts: Hanna, Quantum Mechanics in Chemistry; Chemistry 446 Laboratory Manual (1976).

T. W. Dingle.

September-December only. (3-3)

#### CHEM 490. (1-3) Directed Studies

#### CHEM 499. (3) Thesis

Experimental research under the direction of faculty. This course is designed primarily for Chemistry honours students, but Chemistry majors students may be granted permission by the department to take the course as an elective

R. H. Mitchell and members of the Department.

(0-6;0-6)

#### **GRADUATE COURSES**

Students should consult the Department to determine the graduate courses offered in any particular year.

CHEM 509. (1) Seminar

CHEM 522. (1 1/2-3) Current Topics in Inorganic Chemistry

CHEM 523. (3) Organometallic Chemistry

CHEM 525. (3) Theoretical Inorganic Chemistry

CHEM 526. (11/2-3) Topics in Advanced Inorganic Chemistry

CHEM 533. (3) Organic Synthesis

CHEM 536. (3) Carbohydrate Chemistry

CHEM 538. (3) Biogenesis of Natural Products

CHEM 545. (11/2) Reaction Kinetics and Reaction Rate Theory

546. (11/2) Spectroscopy and the Chemistry of Excited States

CHEM 550. (1 1/2) Elementary Applications of Group Theory

CHEM 554. (11/2) Applied Quantum Mechanics

CHEM 555. (11/2) Statistical Mechanics

CHEM 556. (11/2-3) Topics in Advanced Physical Chemistry

CHEM 565. (3) Theory and Application of Nuclear Magnetic Resonance Spectroscopy

CHEM 566. (3) Chemical Crystallography

CHEM 577. (3) Nuclear and Radio Chemistry

CHEM 590. (1-3) Directed Studies

CHEM 599. M.Sc. Thesis (Credit to be determined but normally 5 units in this Department.

CHEM 630. (11/2-3) Current Topics in Organic Chemistry

CHEM 633. (11/2-3) Topics in Advanced Organic Chemistry

CHEM 634. (3) Advanced Physical Organic Chemistry

CHEM 636. (3) Chemistry of Heterocyclic Compounds

CHEM 638. (3) Chemistry of Natural Products

CHEM 644. (11/2-3) Current Topics in Physical Chemistry

CHEM 645. (11/2) Advanced Electrochemistry

CHEM 699. Ph.D. Dissertation (Credit to be determined.)

## DEPARTMENT OF CLASSICS

David A. Campbell, M.A. (Glasgow), M.A. (Oxon.), Professor, and Chairman of the Department.

Samuel E. Scully, B.A., M.Litt. (Bristol), Ph.D. (Tor.), Assistant Professor and Acting Chairman of the Department to 30 June 1976. (On study leave 1976-77.)

Herbert H. Huxley, M.A. (Cantab.), M.A. (Dublin), F.I.A.L., Professor.

Maurice W. M. Pope, M.A. (Cantab.), F.S.A., Visiting Professor (1975-76).

Peter L. Smith, B.A. (Brit. Col.), M.A., Ph.D. (Yale), Professor.

Geoffrey J. D. Archbold, B.A. (Brit. Col.), M.A. (Cincinnati), Associate Professor.

John G. Fitch, B.A., M.A., (Cantab.), Cert. Ed. (Leeds), Ph.D. (Cornell), Assistant Professor.

Gordon S. Shrimpton, B.A., M.A. (Brit. Col.), Ph.D. (Stanford), Assistant Professor.

Stephen C. Fineberg, B.A. (St. John's Coll.), M.A., Ph.D. (Texas), Sessional Lecturer (1975-76).

#### **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. Degree, see page 146; for graduate courses, see page 47.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

A student may take a General Programme in Classics, which does not necessarily involve language study; a Major in Classics or in Classical Studies, with variable emphasis on Greek, Latin, and Classical studies; an Honours Programme in either Latin or Greek; or an Honours Programme in Classics (advanced study of both Latin and Greek). Students on the General and Major Programmes will normally be taking advanced courses in other departments; honours students in Latin or Greek should note that it may be possible for them to complete an honours programme in a second field, if they have the joint consent of that department and the Classics Department. It is important that students discuss their programmes with members of the Department as early as possible in the course of their studies at the University. Failure to complete prerequisites for advanced courses in this and other departments may seriously limit the type of degree open to a student in his upper years.

## GENERAL

First and Second Years:

The completion of at least 3 units chosen from Departmental offerings (e.g., one of Classical Studies 100; Greek 100; Latin 100 or 140 or 240).

Third and Fourth Years:

9 units in Departmental offerings numbered 300 or above.

#### MAJOR IN CLASSICAL STUDIES

Students must take

- (a) 3 units of Classical Studies at the 100 or 200 level,
- (b) 6 units of language courses (Greek 100, 200, Latin 100, 140, 200) or Latin 240,
- (c) 15 units at or above the 300 level chosen from Departmental offerings, of which at least 9 units must be selected from Classical Studies.

#### MAJOR IN CLASSICS

First and Second Years:

Greek Emphasis:

Completion of Greek 200 plus 3 units of Latin or 3 units of Classical Studies at 100 or 200 level.

Latin Emphasis:

Completion of Latin 200 or 240 plus 3 units of Greek or 3 units of Classical Studies at 100 or 200 level.

NOTE: Students who do not begin the study of Greek or Latin until Second Year may still undertake a Classics major, but they will have to complete prerequisite courses in Third Year.

#### Third and Fourth Years:

15 units in Departmental offerings at or above the 300 level, of which at least 9 units will be in Greek and/or Latin. For major students, Latin 300 and Greek 300 are corequisites for other advanced courses in each

NOTE: Students who wish to proceed to the B.A. Degree with a Major in Classical Studies or in Classics are recommended to offer supporting courses in Modern Languages, Anthropology, English, History, Linguistics or Philosophy.

## **HONOURS**

Students of good general standing who have achieved a first class or high second class standing in Latin or Greek during their first two years may be admitted, with Departmental permission, into an intensified Honours programme.

## First and Second Years:

Required Courses: Greek 100; Latin 100 or 140 or 240; a second course in either Greek or Latin. Students planning to enter Honours Classics should try, if possible, to carry the study of both Greek and Latin to the 200

Recommended: Classical Studies 100, English 121 and 122, any English course at the 200 level.

#### Third and Fourth Years:

Required courses in the Third and Fourth years will normally not exceed 24 units out of a total student programme of 30-36 units. Any of the requirements listed below may be completed in the First and Second Years by a student who has the necessary prerequisites.

#### GREEK

Greek 300, 400 and 12 additional units in Greek numbered above 300, The student must complete 3 units in Greek history (either Greek 350 or Classical Studies 330), and must complete Latin 200 or 240 unless he has special permission from the Department.

#### LATIN

Latin 300, 400 and 12 additional units in Latin numbered above 300. The student must complete 3 units in Roman history (either Latin 350 or Classical Studies 340), and must complete Greek 200 unless he has special permission from the Department.

## CLASSICS

Greek 300, 400; Latin 300, 400; at least 9 additional units in Greek and/or Latin courses numbered above 300. The student must complete 3 units in Greek history (either Greek 350 or Classical Studies 330) and 3 units in Roman history (either Latin 350 or Classical Studies 340).

NOTE: Graduating Honours (Greek, Latin, or Classics) students will be expected to have a reading knowledge of French or German.

Recommended as an elective to Third and Fourth Year General, Major,

and Honours students: Liberal Arts 305.

To obtain a First Class Honours Degree a student must achieve (1) a graduating average of at least 6.5, (2) a grade point average of at least 6.5 in those Departmental courses at the 300 and 400 level that are required for the degree programme, and (3) a grade of at least B+ in any required 400-level language course.

To obtain a Second Class Honours degree a student must achieve (1) a graduating average of at least 3.5, (2) a grade point average of at least 3.5 in those Departmental courses at the 300 and 400 level that are required for the degree programme, and (3) a grade of at least C+ in any required

400-level language course.

A student who fails to meet departmental requirements for First Class standing in the Honours programme but has a First Class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet departmental requirements for Second Class standing but has a Second Class graduating average will be offered a Second Class Major Degree.

### **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

NOTE: Students who obtained credit for Greek 350 in previous years may not enrol in Greek 390C for credit; those with credit for Latin 350 may not enrol for credit in Latin 390D; and those with credit for Latin 301, 302, 303, 304 or 305/306 may not enrol for credit in Latin 390C, 490K, 390A, 390B or 490G respectively.

#### CLASSICAL STUDIES

## A knowledge of the Greek and Latin languages is not required for the following

Classical Studies 100 is designed primarily as an elective for students in all fields. However, it is also a prerequisite for Classical Studies 300 and one among a choice of prerequisites for Classical Studies 320 and 325. Any student in Second Year who has successfully completed Classical Studies 100 should take either a course in Latin or Greek or a Classical Studies course at the 200 or 300 level. Any student in Second Year may register for courses in Classical Studies at the 300 level, except for 300, 320 and 325 (see below for prerequisites). Classical Studies 100 may not be taken by students who have already received credit for any courses in Classical Studies at the 300 level.

Appropriate credit in the Department of History may be given for Classical Studies 330 or 340 or 430 or 440. Philosophy 421 and 422 are acceptable for credit in all programmes in the Department of Classics in lieu of any 400-level course in Classical Studies.

#### CLAS 100. (3) Greek and Roman Civilization

An approach to the civilization of Greece and Rome through the evidence of literature, history, and archaeology. Attention will be focused upon those aspects of ancient cultural and intellectual growth that are of significance in the western tradition. Emphasis will be placed upon the Minoan and Mycenean civilizations, fifth-century Athens, and Augustan Rome.

Readings will include Homer's *Iliad* and *Odyssey*, selections from Herodotus and Thucydides, Sophocles' *Oedipus The King* and other representative Greek dramas, *Phaedo* of Plato, Livy, *The Early History of Rome*, Virgil's *Aeneid* and part of Ovid's *Metamorphoses*.

Essays will be required, and there will be a written examination.

(3-0; 3-0)

#### CLAS 200 (formerly 301). (11/2) Mythology of Greece and Rome

A study of the origins of classical myth, its expression in the literature and art of ancient Greece, and its further development in the Roman experience.

Topics will include cosmic and divine myth; heroic saga; the influence of classical myth on later European culture.

Consideration will be given to various modern systems of analysis and interpretation.

Texts: Hesiod, Theogony; Euripides, Bacchae; Ovid, Metamorphoses; Morford and Lenardon, Classical Mythology. September-December only. (3-0)

## CLAS 201. (11/2) Tradition and Originality in Classical Literature

A comparative study of the content and form of major works by Greek and Roman writers. After a brief introduction to the genres of classical literature, the course will concentrate on the two important genres of tragedy and the poetry of instruction, together with not more than two others to be chosen from the following: philosophy, lyric poetry, biography, pastoral poetry, oratory. The following will be among the topics discussed: what part does imitation or the adaptation of traditional material play in classical literature? How can a creative writer 'make it new' while working within a strong tradition?

Texts: (a) Euripides, Hippolytus and Trojan Women; Seneca, Phaedra and Trojan Women;

- (b) Hesiod, Works and Days; Lucretius, The Way Things Are; Virgil, Georgics; Ovid, The Art of Love;
- together with one or two of the following groups: (c) Plato, Symposium or Republic X; Cicero, On the Good Life;
  - (d) Greek Lyric Poetry; Catullus, Poems; Horace, Odes;
- (e) Plutarch, The Rise and Fall of Athens; Suetonius, The Twelve Caesars:
  - (f) Theocritus, Idylls; Virgil, Eclogues;
  - (g) Demosthenes, Political Oratory; Cicero, Selected Political Speeches.
  - J. G. Fitch. January-April only. (3-0)

#### CLAS 207 (Philosophy 207). (3) Greek Historical and Philosophical Thought

An introductory study of the development of Greek thought from the prescientific, mythical world views to the theories developed in the fourth century B.C. The parallel development of systematic historical and philosophical thought out of the common ground of the earlier myths will be examined, and the effort to develop acceptable models of explanation for human as well as natural events will be seen to be a point common to the two strands of Greek thought. The philosophical emphasis will be on metaphysical and epistemological issues, and the ideas singled out for study will relate to the structure of the cosmos, the nature of man, and man's relationship to the universe. An attempt will be made to understand these ideas, not as isolated, technical doctrines, but as responses to problems arising within a particular cultural context.

Texts: Hesiod Theogony, Plato (Mentor, ed. Rouse), Aristotle (Mentor, ed. Bambrough), The Greek Historians (ed. Toynbee), Aristotle, Constitution of Athens (ed. Hafner).

(Not offered 1976-77.)

(3-0;3-0)

#### CLAS 300 (formerly 310). (11/2) Classical Epic

A study of Greek and Roman epic poetry from the time of Homer to the 5th century A.D. In addition to Homer and Virgil the following authors will be represented: Apollonius of Rhodes and Valerius Flaccus (for the Golden Fleece legend), Statius (for the 'Seven Against Thebes'), Lucan (for the epic on Caesar and Pompey), Claudian (for the Rape of Persephone) and Quintus of Smyrna (for the continuation of Homer's Iliad).

Prerequisite: Classical Studies 100.

H. H. Huxley.

September-December only. (3-0)

#### CLAS 320 (formerly 315). (11/2) Greek Tragedy

The origins and development of tragic drama in ancient Greece. The study, in English translation, of representative plays of Aeschylus, Sophocles and Euripides.

Prerequisite: Classical Studies 100 or 200 or 201 or permission of the Department.

J. G. Fitch.

September-December only. (3-0)

#### CLAS 321. (11/2) Classical Comedy and Satirical Writing

A critical survey through the reading in translation of the major works in comedy of the Greco-Roman world together with a survey of the origin and development of satire in classical times.

## CLAS 325. (1 1/2) Classical Literary Criticism

A study of the beginnings of literary criticism, with emphasis on Aristotle's *Poetics* and Horace's *The Art of Poetry*. The relationship of the poets and the Muses, comic paredy as a form of criticism, Plato's account of poetic inspiration and his views on censorship, and 'Longinus' *On Sublimity* will be among the topics discussed.

Texts: Ancient Literary Criticism (ed. Russell and Winterbottom); G. M. A. Grube, The Greek and Roman Critics.

Prerequisite: Classical Studies 100 or 201 or 320 or 321 or permission of the Department.

January-April only. (3-0)

## CLAS 330. (3) Greek History

Early Aegean civilizations; the rise of the Greek city-state, with special emphasis on the political, economic, and cultural achievements of the fifth and fourth centuries B.C.; the Hellenistic world.

Outside reading includes selected works listed on the bibliographical sheets distributed at the beginning of lectures. One essay is required in the first term and one in the second term.

Texts: N. G. L. Hammond, A History of Greece to 322 B.C.; Plutarch, ed. Edmund Fuller, Lives of the Noble Greeks; Herodotus, The Histories; Thucydides, The History of the Peloponnesian War.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

#### CLAS 340. (3) Roman History

The growth of Rome and the development of her political institutions during the Republic; the social and economic history of the Empire; the transition from the classical to the medieval world.

Outside reading includes selected works listed on the bibliographical sheets distributed at the beginning of lectures. One essay is required in the first term and one in the second term.

Texts: M. Rostovtzeff, Rome; Plutarch, ed. Edmund Fuller, Lives of the Noble Romans; W. G. Sinnigen, Rome.

G. J. D. Archbold. (3-0; 3-0)

#### CLAS 370. (11/2) Greek and Roman Thought

A study of Greek and Roman ideas about society, morality and the state as they are evidenced in the works of literature and history. Topics include the status of women in Greece and Rome; slavery; marriage and the family; athletics; the relationship between gods and men and between the gods and ethics; and, briefly, the changes brought by Christianity to Greek and Roman thinking. Authors to be studied include Homer, Hesiod, the tragic and comic poets, the historians, Plato, Lucretius, Cicero's philosophical works, Pliny's letters and the New Testament.

# CLAS 371 (formerly 350). (1 ½) Art and Archaeology of Ancient Greece and the Aegean

A study of the Minoan and Mycenaean Ages with emphasis on architecture, frescoes and pottery. Some consideration of the origins of early Greek religion and mythology as traceable in archaeological remains. Examination of the principles of Greek architecture through a study of the monuments on the Acropolis at Athens.

## CLAS 372. (1 $\frac{1}{2}$ ) Art and Archaeology of the Roman World

The beginnings of the Roman cultural experience as seen through Etruscan remains. Some consideration of the Hellenistic age and its influence upon Rome. The Roman city with concentration on one or more of Pompeii, Herculaneum and Ostia. A study of Roman fresco painting and mosaics.

January-April only. (3-0)

#### CLAS 380. (1 1/2) The Life and Times of Socrates

An examination of a critical moment in Greek intellectual and political life, as seen from various points of view. Topics include: the teaching methods of Socrates and the Sophists, the political background of his trial, the religious and social questions involved, and types of Socratic literature. The approach to the course will not be primarily philosophical; rather, an attempt will be made to see why his challenge to conventional Athenian morality so deeply influenced his fellow-citizens, and to explain why he appears as one of the most fascinating personalities of world history.

Texts: Aristophanes Clouds, Plato Euthyphro, Apology, Crito, Protagoras, Xenophon Memoirs of Socrates and selections from other authors.

January-April only. (3-0)

#### CLAS 381. (11/2) Ancient Religions

An introduction to religious thought and practice with particular reference to the Roman world. Some consideration will be given to religion in major Latin writers such as Cicero, Lucretius, Catullus, Tibullus, Propertius, Virgil, Horace and Ovid. There will be a brief review of Judaism and Christianity in the early Empire. Exotic religions—Mithraism, the mysteries of Cybele, the rites of the Druids, the cult of Isis and Osiris—will be studied.

#### CLAS 430 (formerly 460). (1 1/2) Greek History Seminar

Intensive study of selected topics in Greek history. Prerequisite or corequisite: Classical Studies 330 or permission of the Department.

G. S. Shrimpton.

September-December only. (2-0)

## CLAS 440 (formerly 460). (11/2) Seminar in the History of the Roman World

Intensive study of selected topics in the development of the Roman world.

Prerequisite or corequisite: Classical Studies 340 or permission of the Department.

## GREEK

#### GREE 100. (3) Beginners' Greek

A basic introduction to the Greek language, including the following: the three declensions of the noun; the regular, irregular and contracted verbs; a survey of verbs in m; the main constructions; practice in translating sentences into Greek; sight translation. Tests and examinations will be given during the course of the year.

Texts: Peckett and Munday, Thrasymachus; Goodwin and Gulick, Greek Grammar. It is recommended that students purchase a Liddell and Scott Intermediate Greek-English Lexicon for this course.

H. H. Huxley. (4-0; 4-0)

#### GREE 200. (3) Introduction to Greek Literature

Greek 200 is open to students who have completed Greek 100 or its equivalent, and is a prerequisite to Greek courses at the 300 level. Review of grammar mainly through reading; some sight translation and prose composition. Careful reading of the following works: Plato, Euthyphro; Euripides, Alcestis; Thucydides, History of the Peloponnesian War, Book I, Chapters 89-118. Also required are North and Hillard, Greek Prose Composition; Liddell and Scott, Intermediate Greek-English Lexicon; and Goodwin and Gulick, Greek Grammar. Tests and examinations will be given during the course of the year.

J. G. Fitch. (4-0; 4-0)

## GREE 300. (3) Readings in Greek Prose, Drama and Epic

Prerequisite: Greek 200. The basic third-year course for Major and Honours students; advanced Greek students may take the course in their second year. Selected texts (to be varied to some extent from year to year) will be studied from prose and verse authors. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Greek into English. Unprepared translation will be included in the final examination.

Texts: Homer, Odyssey, Books IX-XI; Herodotus, History [40-50 chapters to be announced]; Sophocles, Antigone; Thucydides, History of the Peloponnesian War, Book VI (40-50 chapters to be announced); and Plato, Apology. (3-0; 3-0)

#### GREEK 390. (11/2) Greek Authors

Extensive reading and analysis of major Greek texts. The Department will offer no more than two of the following each year: 390A Homer; 390B Greek Tragedy; 390C Herodotus; 390D Xenophon.

Prerequisite: Greek 200. (See Note on page 44.)

(1976-77: 390B and 390D; 1977-78: 390A and 390C.)

One term only, to be announced. (3-0)

## GREE 400. (3) Advanced Reading in Greek Oratory, Philosophy and Drama

The basic fourth-year course for Honours students; prerequisite: Greek 300. Sight translation will be regularly practised, and unprepared translation will be included in the final examination.

Texts (subject to some variation from year to year): A careful reading of selected private speeches of Demosthenes; Plato, Republic, Book I; Aeschylus, Prometheus Vinctus; and Aristophanes, Clouds.

D. A. Campbell, G. S. Shrimpton. (3-0; 3-0)

## GREE 490. (1 1/2) Directed Studies in Greek

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 490A Homeric Corpus; 490B Hesiod; 490C Greek Lyric Poetry; 490D Greek Tragedy; 490E Greek Comedy; 490F Thucydides.

Prerequisite: completion of at least 3 units of Greek at the 300 level or above, and Department permission.

One term only, to be announced. (2-0)

## GREEK 491. (3) Directed Studies in Greek

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 491A Homeric Corpus; 491B Hesiod; 491C Greek Lyric Poetry; 491D Greek Tragedy; 491E Greek Comedy; 491F Thucydides.

Prerequisite: Department permission. Students will normally not be permitted to take, concurrently or successively, Greek 490 and 491 courses in the same area. (2-0; 2-0)

## LATIN

Students with no previous study of Latin or 1 year of high school Latin will register for Latin 100. Students with 2 or more years of high school Latin will normally register for Latin 200. Latin 200 is a prerequisite for all Latin courses at the 300 level. Second year students who have completed Latin 200 may register for any Latin course at the 300 level.

#### LATI 100. (3) Beginners' Latin

No previous knowledge of Latin is required. An introduction to the Latin language with easy readings from Roman authors.

Text: To be announced. (4-0; 4-0)

All work at the 200 level or beyond will require a Cassell's New Latin Dictionary and Allen & Greenough, New Latin Grammar.

#### LATI 200. (3) Latin Language and Literature

Prerequisite: Latin 100 or equivalent; not open to students who have completed Latin 140. The emphasis will be on an increased understanding of the language through a reading of the authors.

Texts: Oerberg et al., Lingua Latina, and selected readings from Latin authors; Cassell's New Latin Dictionary; Allen & Greenough, New Latin Grammar.

D. A. Campbell.

(4-0;4-0)

#### LAT 300. (3) Latin Literature, especially of the Golden Age

The basic third-year course for Major and Honours students; advanced Latin students may take the course in their second year. Selected texts (to be varied to some extent from year to year) will be studied from prose and verse authors, principally of the Ciceronian and Augustan ages. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Latin into English. Students will be expected to practise reading aloud from the authors selected, and may be examined on their competence. Unprepared translation will be included in the final examination.

Texts: Cicero, Pro Caelio; Livy, Book XXI or Book XXX; Virgil, Aeneid VI, or IV, or II or XII; Horace, selected Odes. (3-0; 3-0)

### LATIN 390. (1 1/2) Latin Authors

Extensive reading and analysis of major Latin texts. The Department will offer no more than two of the following each year: 390A Virgil, Eclogues and Georgics; 390B Virgil, Aeneid; 390C Horace; 390D Roman Historians.

Prerequisite: Latin 200.

(See Note on page 44.)

(1976-77: 390B and 390D; 1977-78: 390A and 390C.)

H. H. Huxley, G. J. D. Archbold.

One term only, to be announced. (3-0)

#### LATI 400. (3) Latin Literature, especially of the Silver Age

The basic fourth-year course for Honours students; prerequisite: Latin 300. The authors studied (subject to some variation from year to year) will be drawn mostly from Silver Latin. Problems of syntax, metre and stylistics will be examined. Sight translation from more difficult authors will be regularly practised, and unprepared translation will be included in the final examination.

Texts: Seneca, Select Letters, or Seneca, De Vita Beata; Tacitus, Agricola, or Annals I or XIV; Lucretius, V, III, or I; Juvenal, Satires I, III, and X. (3-0; 3-0)

#### LATI 490. (11/2) Directed Studies in Latin

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 490A Roman Comedy, 490B Satire and Invective, 490C Lucretius, 490D Roman Elegy, 490E Ovid, 490F Medieval Latin, 490G Cicero, 490H Roman Historians, 490J History of the Latin Language, 490K Literary Criticism and Rhetoric.

Prerequisite: Completion of at least 3 units of Latin at the 300 level or above, and permission of the Department.

(See Note on page 44.)

One term only, to be announced. (2-0)

### LATIN 491. (3) Directed Studies in Latin

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 491A Roman Comedy; 491B Satire and Invective; 491C Lucretius; 491D Roman Elegy; 491E Ovid; 491F Medieval Latin; 491G Cicero, 491H Roman Historians; 491J History of the Latin Language; 491K Literary Criticism and Rhetoric

Prerequisite: Permission of the Department. Students will normally not be permitted to take, concurrently or successively, Latin 490 and 491 courses in the same area. (2-0; 2-0)

#### **GRADUATE COURSES**

CLAS 510. (3) Classical Epic

CLAS 520. (3) Classical Drama

CLAS 530. (3) Ancient Historiography

CLAS 540. (3) Lyric and Elegiac Poetry

CLAS 560. (3) Seminar in Augustan Poetry

CLAS 580. (1 1/2) Greek Composition, Stylistics and Metre

CLAS 581. (11/2) Latin Composition, Stylistics and Metre

CLAS 599. M.A. Thesis

The unit value of the thesis will normally be 3 or 6. In exceptional cases more than 6 units may be awarded. Before the thesis is begun, the candidate must arrange with his advisors and the Department the number of units to be assigned for it.

## DEPARTMENT OF CREATIVE WRITING

Chairman of the Department: appointment pending.

Robin Skelton, B.A., M.A. (Leeds), F.R.S.L., Professor.

William D. Valgardson, B.A., B.Ed. (Man.), M.F.A. (Iowa), Associate

Lawrence W. Russell, B.A. (U. of Vic.), M.A. (Calif.), Assistant Professor. Derk Wynand, B.A., M.A. (Brit. Col.), Assistant Professor.

Ken Mitchell, Visiting Writer (1975-76).

Charles M. Lillard, B.A., M.F.A. (Brit. Col.), Sessional Lecturer (1975-76). John Montague, Sessional Lecturer (1975-76).

William D. Thomas, B.A., M.A. (U. of Vic.), Sessional Lecturer (1975-76). Marion Rippon, R.N., Part-time Lecturer (1975-76).

Jeni Couzyn, B.A. (Natal), Part-time Sessional Lecturer (1975-76).

Andreas Schroeder, B.A., M.A. (Brit. Col.), Part-time Sessional Lecturer (1975-76).

#### GENERAL AND MAJOR PROGRAMMES

Although the programme offered by the Creative Writing Department is intended, in the main, to serve those students who have shown some ability as writers, it also includes a number of lecture courses which may be of interest and value to non-writing students. Entrance to these courses (marked \*) is unrestricted. All other courses can only be taken by students who have secured the permission of the Department. Students wishing to take these restricted courses should, when applying for entrance to them, provide some examples of their written work.

In normal circumstances, Creative Writing 100 is prerequisite to all Creative Writing Seminars. However, students who satisfy the Department's standards, by either the production of written work or the passing of courses in Creative Writing at other institutions, may be given credit for Creative Writing 100 and enter the Programme at the second year level. Only in extremely exceptional cases, will students taking a major programme in Creative Writing be freed from the obligation to take Creative

Writing 200.

The Creative Writing Programme should include a coherently organized group of courses from related disciplines. Members of the Creative Writing Department are available to help students in the appropriate selection of

their courses.

Students wishing to take a General Programme in Creative Writing will be required to take Creative Writing 100, English 121 and 122 or 111 and 115, Creative Writing 200, 3 units from English 200 or 201/3/4/5 and 3 units chosen from Creative Writing 201/2/3, and not less than 9 units of Creative Writing numbered 300 or above, including at least one workshop

Students wishing to take a Major Programme in Creative Writing will be required to take Creative Writing 100, English 121 and 122 or 111 and 115, Creative Writing 200, 3 units from English 200 or 201/3/4/5 and 3 units chosen from Creative Writing 201/2/3, and not less than 15 units of Creative Writing numbered 300 or above. The courses taken must include at least one workshop in each of the final two years.

No student will be permitted to take more than two workshops in any

given year.

Subject to the regulations relating to prerequisites, entrance to courses in the Creative Writing Programme is open to any student who satisfies the Department as to his or her ability, regardless of the faculty in which the student is registered. Students in the Faculty of Fine Arts and the Faculty of Education, subject to the regulations of those faculties, may take Creative Writing courses for credit.

#### COURSES

#### FIRST YEAR

#### CW 100. (3) Introduction to Creative Writing

This course consists of a one hour weekly lecture and a weekly two-hour workshop. The lectures will present a non-historical survey of some of the basic structures in English Poetry, Drama, and Fiction, together with a preliminary discussion of the nature of the creative process as regards literature. The workshop will involve the students in the study of "models" in poetry, fiction, and drama, and in the writing of compositions in all three genres. Each workshop will contain not more than 15 students.

Corequisite: English 121 and 122 (or English 111 and 115 by permission of the Department).

Texts: Paul Engle: On Creative Writing and the instructor's choice.

Members of the Department.

(1-2:1-2)

#### SECOND YEAR

## \*C W 200. (3) The Theory and Practice of Literary Creation

This is a lecture course surveying the nature of the creative process and considering the many theories about it. Use will be made of authors' worksheets, both published and in the Rare Book Room of the McPherson Library.

Suggested reading: Brewster Ghiselin: The Creative Process: Anthony Ostroff: The Contemporary Poet as Artist and Critic; Rosemary Harding: The Anatomy of Inspiration; Joseph Langford: Poet's Choice.

R. Skelton. (3-0; 3-0)

## CW 201. (3) Poetry Workshop

A workshop seminar in which the students are instructed and guided in the writing of poetry.

Prerequisite: Creative Writing 100 or permission.

Text: Robin Skelton: The Practice of Poetry. (0-2;0-2)

## CW 202. (3) Fiction Workshop

A workshop seminar in which the students are instructed and guided in the writing of fiction.

Prerequisite: Creative Writing 100 or permission.

W. D. Valgardson.

(0-2; 0-2)

## CW 203. (3) Drama Workshop

A workshop seminar in which students are instructed and guided in the writing of drama.

Prerequisite: Creative Writing 100 or permission. (0-2; 0-2)

#### CW 205. (3) Journalism: I

This course provides the student with the fundamental knowledge of the methods of gathering news stories and then organizing the material for writing. The writing portion of the course covers the principles of pyramid writing for news editing. This course also covers the mechanical aspects of newspaper production as they relate to the handling of news copy. The basic emphasis will be on writing assignments in accepted conventional Canadian style and will meet the needs of the individual student.

Not open to students with credit for journalism in Creative Writing 404.

(0-2;0-2)

#### THIRD YEAR

#### C W 303 (formerly ENGL 401). (3) Poetry Workshop

Prerequisite: Creative Writing 201 or permission. (0-3;0-3)

### C W 304 (formerly ENGL 402). (3) Fiction Workshop

Prerequisite: Creative Writing 202 or permission.

W. D. Valgardson. (0-3;0-3)

\*See first paragraph in the column on the left.

#### CW 305 (formerly ENGL 403). (3) Drama Workshop

Prerequisite: Creative Writing 203 or permission. (0-3; 0-3)

#### CW 306. (3) Seminar in Literary Procedures

This workshop-seminar will instruct students in various skills which may be of use to them in pursuing either an academic or non-academic career. Matters dealt with will include descriptive bibliography, textual editing, collation of texts, indexing, reviewing, copy-editing, article writing, compiling and anthologizing, the preparation of screen and TV treatments, writing for radio, and interviewing. Copyright law and publishing practices will also be discussed.

Enrolment will be limited.

R. Skelton. (0-3;0-3)

## \*C W 307 (formerly one-half of 300). (1 1/2) Structure in Pre-Modern English

A lecture course surveying the structural composition of key poems of the English Language, taking its material from the 17th to the beginning of the 20th centuries. Aspects of structure discussed will include Prosody, Diction, Imagery, Abstract Form, and Sound Patterns.

September-December only. (3-0)

#### \*C W 308 (formerly one-half of 300). (1 1/2) Structure in Twentieth Century Poetry

A lecture course surveying the structural composition of key poems of the English Language, taking its material from the 20th century, and concentrating upon the technical innovations of 20th century writers. Aspects of structure discussed will include Prosody, Diction, Imagery, Organic Form, Sound Patterns, Concrete Poetry and Found Poetry. January-April only. (3-0)

## \*C W 309 (formerly one-half of 301). (11/2) Structure in Short Fiction

A lecture course surveying the structural composition of key works of short fiction (short stories, contes, novellas) written in the English language, taking its material from the 17th to the 20th centuries.

W. D. Valgardson September-December only. (3-0)

#### \*C W 310 (formerly one-half of 301). (1 1/2) Structure in the Novel

A lecture course surveying the structural composition of key novels written in the English language, taking its material from the 18th to the 20th centuries.

W. D. Valgardson January-April only. (3-0)

## \*C W 311 (formerly one-half of 302). (11/2) Structure in Stage Drama

A lecture course surveying the structural characteristics of stage drama written in English, taking its material from the 16th to the 20th centuries. September-December only. (3-0)

#### \*C W 312 (formerly one-half of 302). (1 $\frac{1}{2}$ ) Structure in Cinema and Television Drama

A lecture course surveying the structural characteristics of screen drama, making use of published film and television plays, and of actual films. January-April only. (3-0)

#### \*C W 313 (formerly one-half of 204). (1 1/2) Recurrent Themes in Literature

A lecture course surveying recurrent themes in English literature and in other literatures in translation. September-December only. (3-0)

#### \*C W 314 (formerly one-half of 204). (1 1/2) Changing Perspectives in Literature

A lecture course surveying the different ways in which writers have tackled similar subject matter, taking its material from English Literature and other literatures in translation. January-April only. (3-0)

### CW 315. (3) Journalism: II

This programme deals with some of the more specialized aspects of Journalism. After a brief refresher programme in general news reporting, students will be introduced to more specialized aspects of news reporting including courts, municipal affairs, cultural events, the fundamentals of reviewing, and the "higher journalism." Attention will also be paid to Te'evision journalism. Students will be encouraged to initiate investigative projects and to generate their own story and feature ideas. Emphasis will be placed on written assignments, rather than on the theoretical approach.

Prerequisite: Creative Writing 205, or permission of the instructor.

(0-3; 0-3)

## C W 401 (formerly ENGL 404). (3) Advanced Poetry Workshop

Prerequisite: Creative Writing 303. (0-3;0-3)

## C W 402 (formerly ENGL 405). (3) Advanced Fiction Workshop

Prerequisite: Creative Writing 304.

W. D. Valgardson. (0-3;0-3)

## C W 403 (formerly ENGL 406). (3) Advanced Drama Workshop

Prerequisite: Creative Writing 305. (0-3;0-3)

#### CW 404. (3) Special Studies Seminar

This Seminar exists for students who wish to specialize in fields outside the three main categories of Poetry, Fiction and Drama. It will cater to students working in Psycho-Linguistics, and in Multi-Media, and in the field of Translation. It will also cater to students in Journalism. It will be taught on a tutorial basis.

Members of the Department and others. (0-3:0-3)

#### \*C W 405 (formerly one-half of 400). (1 $\frac{1}{2}$ ) Innovations in Twentieth Century Poetry

A lecture course surveying key works in twentieth century poetry and discussing experimental writing. The material discussed will be taken from the literature of a number of countries.

September-December only. (3-0)

## \*C W 406 (formerly one-half of 400). (1 1/2) Innovations in Twentieth Century

A lecture course surveying key works in twentieth century fiction and drama and discussing experimental writing. The material discussed will be taken from the literature of a number of countries.

D. Wynand.

January-April only. (3-0)

NOTE: Every student in a fourth year workshop will be required to present a substantial body of work organized in book form. The creation of this work will be supervised by an appropriate member of the Department.

\*See page 47, first paragraph.

## DEPARTMENT OF ECONOMICS

Leonard Laudadio, B.A. (Puget Sound), M.A., Ph.D. (Wash.), Professor and Chairman of the Department.

Leo I. Bakony, B.A. (Brit. Col.), Ph.D. (Wash.), Professor.

Gordon W. Bertram, B.A. (Brit. Col.), Ph.D. (Calif.), Professor.

J. Colin H. Jones, B.A. (Wales), M.A. (Montana St.), Ph.D. (Queen's), Associate Professor.

Izzud-Din Pal, B.A., M.A. (Panjab), M.Sc. Econ. (London), Ph.D. (Mc-Gill), Associate Professor.

Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Associate Professor.

Kenneth Avio, B.Sc. (Ore.), M.S., Ph.D. (Purdue), Assistant Professor.

Robert V. Cherneff, B.A. (U. of Vic.), M.A., Ph.D. (Wash.), Assistant Professor.

Joseph Schaafsma, B.A., M.A. (McMaster), Ph.D. (Tor.), Assistant Professor.

John A. Schofield, B.A. (Durham), M.B.A. (Indiana), M.A., Ph.D. (S. Fraser), Assistant Professor.

William D. Walsh, B.Com. (Brit. Col.), M.A., Ph.D. (Yale), Assistant Professor.

Donald G. Ferguson, B.A., M.A. (Tor.), Lecturer.

James E. Currie, B.Com. (Brit. Col.), M.B.A. (McMaster), Part-time Lecturer.

Robert W. McQueen, B.Com. (Brit. Col.), C.A., Part-time Lecturer.

Colin Crisp, B.A. (U. of Vic.), M.A. (Queen's), Part-time Sessional Lecturer (1975-76).

Andrew Mirlin, B.A., M.A. (West. Ont.), Part-time Sessional Lecturer (1975-76)

FOURTH YEAR

#### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 146; for graduate studies, see page 51.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

#### Requirements:

- (i) For General Programme with 9 units in Economics:
  - (a) Economics 201 and 202 (or 200).
  - (b) Economics 302 and 303, and 6 additional units in Economics courses numbered 300 or above.

#### (ii) For Major:

- (a) Economics 201 and 202 (or 200) with at least a second class standing, or permission of the Department; and Economics 240.
- (b) A total of 15 units in courses numbered 300 and above, including 321, and one of the following options: 302 and 303, or 302 and 301, or 300 and 303, or 300 and 301.
- (c) Mathematics 130 (or 100 and 101) or 151 and 102 (formerly 140) unless permitted by the Department to omit this requirement in special circumstances.

#### (iii) For Honours:

- (a) Mathematics 130 (or 100 and 101) or 151 and 102 (formerly 140) unless permitted by the Department to omit this requirement in special circumstances.
- (b) Economics 201 and 202 (or 200) with at least a high second class standing or permission of the Department; and Economics 240.
- (c) Economics 300, 301, 321, 340 (or Statistics 253), 470 and 21 additional units of which at least 12 units must be in Economics courses numbered above 300 and at least 6 units must be in another subject or subjects with the approval of the Depart-

Recommended: Commerce 151 (11/2 units) and 190 (11/2 units), 3 units of Mathematics in addition to Mathematics 151 and 102 (formerly 140), Political Science 200 or 216 (formerly 318).

- (d) Admission to Honours programme, which should be sought at the end of the Second Year, requires permission of the Department. Interested students should consult the Department as early as possible in the first two years. Honours students will be required to maintain at least a second class average in Economics courses taken in the Third and Fourth Years. Economics 470 is required for all Fourth Year Honours students. Third Year Honours students will be required to attend the Seminars.
- To obtain a First Class Honours Degree the requirements will be: a graduating average of at least 6.5; a first class average computed on the basis of all upper level Economics courses, except Economics 470; and at least a second class grade in Economics 470.
- (f) To obtain a Second Class Honours Degree the requirements will be: a graduating average of at least 3.5; a second class average computed on the basis of all upper level Economics courses, except Economics 470; and at least a C grade in Economics 470.

#### UNDERGRADUATE COURSES

#### **ECONOMICS**

Unless indicated otherwise, courses begin in September and end in April.

#### INTRODUCTORY AND INDIVIDUAL COURSES

Students who wish to take only one course in Economics should consider Economics 100. Upper division courses may also be taken subject to the following regulations governing the prerequisite courses.

Economics 201 and 202 are prerequisites for all Third Year courses, but in special cases, Economics 201 and 202 may be taken concurrently with Economics courses numbered 305 and above with the permission of the Department. Economics 302 and 303, or 300 and 301 (or any of the options listed under Major (b) above) are prerequisites for all courses numbered 400 and above unless permission is granted by the Department.

### ECON 100. (3) The Canadian Economy — Principles, Problems and Policies

An introduction to the basic concepts of economic analysis. Discussion of the process of decision making by consumers and procedures. The meaning of equilibrium and the determination of national income. Some discussion of Canadian institutions and economic policies, cycles, growth, and international trade

Prerequisite: None; credit cannot be obtained by those who have previous credit in Economics; Economics 100 and 201/202 cannot be taken concurrently.

Text: To be announced.

Members of the Department: sections to be announced. (3-0:3-0)

### ECON 201 (formerly one-half of 200). (1 1/2) Principles of Microeconomics

The principles of microeconomics analysis with special reference to the theory of demand, the theory of the firm and the theory of distribution.

Prerequisite: None; Economics 100 and 201 cannot be taken concurrently; not open to first-year students. September-December only.

#### ECON 202 (formerly one-half of 200). (1 1/2) Principles of Macroeconomics

The principles of macroeconomic analysis with special reference to fluctuations in income and prices, monetary and fiscal policies for economic stabilization.

Prerequisite: None; Economics 100 and 202 cannot be taken concurrently; not open to first-year students. January-April only. (3-0)

#### ECON 240 (formerly 340). (1 1/2) Descriptive Statistics

Methods of Sampling, Frequency Distributions, Frequency Charts, Measures of Central Tendency, Measures of Dispersion, Measures of Shape, Index Numbers, Trend Analysis, Regression and Correlation as a Descriptive Technique, Seasonality.

Text: To be announced. Problems assigned weekly.

NOTES: Prerequisites: Mathematics 151 and 102 (formerly 140), or Mathematics 180 (formerly 150) or permission of the Department; Economics 100, or this course may be taken concurrently with Economics 200.

J. Schaafsma. January-April only. (3-0)

#### ECON 300. (3) Microeconomics

Theories of demand and production; pricing of factors of production; general equilibrium theory; welfare economics; some applications of price theory.

Text: To be announced.

L. Laudadio. (3-0; 3-0)

#### ECON 301 (formerly 400). (3) Macroeconomic Theory

Theories of income and employment with special reference to the classical and the Keynesian models; the dynamics of aggregate supply and demand; theory of inflation; economic growth.

Text: To be announced.

R. V. Cherneff. (3-0; 3-0)

#### ECON 302. (1 1/2) Intermediate Microeconomic Theory

The allocation of resources under competitive and non-competitive market conditions. Analytical significance of prices, wages, and rents in understanding the market exchange economy. Problems of private and public choice in a decentralized and centrally planned economic environment. Implications of tax, ration, and licensing schemes for economic management. Not open to students with credit in Economics 300.

Text: To be announced

Members of the Department. September-December only. (3-0)

## ECON 303 (formerly one-half of 302). (1 $\frac{1}{2}$ ) Intermediate Macroeconomic Theory

Theories of aggregate economic behaviour; the determination of national income and employment, consumption, investment, inflation, growth and fluctuations, economic policy. Not open to students with credit for Economics 301 or 302 (3).

Text: To be announced.

W. D. Walsh. January-April only. (3-0)

#### ECON 305. (11/2) Introduction to Money and Banking

The principles of money, credit creation and banking; organization, operation and control of the banking system; and the relationship between the quantity of money and the level of economic activity.

Text: To be announced. Supplemental Reading.

K. Avio. September-December only. (3-0)

#### ECON 310. (3) Industrial Organization and Public Policy

Problems of competition and monopoly; relevant public policy, with special reference to Canada.

Text: To be announced. Supplementary reading and term paper.

J. C. H. Jones. (3-0; 3-0)

#### ECON 315. (3) Labour Economics and Institutions

An examination of labour as a factor of production; the development of national labour markets and their contemporary structure; functions and performance. Amongst other areas, consideration will be given to the following; industrial relations systems, labour history, the nature of organized labour, the collective bargaining process, contemporary labour problems and public policy.

Text: To be announced. Supplementary reading.

W. D. Walsh. (3-0; 3-0)

#### ECON 320 (formerly one-half of 420). (1 1/2) Economic Development

Some characteristics of the process of development; measurement of economic development and problems of international comparison: problems of transformation of less developed economies in the national and international framework. An examination of Canada's economic relations with some developing countries.

Text: To be announced.

I.-D. Pal. September-December only. (3-0)

#### ECON 321. (3) The Economic History of Canada

The study of long-run economic growth and welfare in the Canadian economy, with the aid of economic analysis, quantitative data and other historical materials. Emphasis on the development of the Canadian economy from a resource-based economy to a developed industrial economy within an international setting. Consideration of the sources of Canadian economic growth and the reasons for Canadian income differentials with other nations.

Text: To be announced. Term paper. Supplemental reading.

G. W. Bertram. (3-0; 3-0)

#### ECON 323. (3) Comparative Economic Systems

A study of the economic systems of societies at all levels of economic and social development. The first term concentrates on the economic systems of tribal and peasant societies, and the emergence of the market as a form of social and economic organization. The second term is devoted to the analysis of modern economic systems. The roles of the market and economic planning as forms of economic organization and control are examined in detail for several representative countries, e.g. Canada, U.S.S.R., France, China

Text: To be announced. Supplementary reading.

D. G. Ferguson. (3-0; 3-0)

#### ECON 325. (11/2) Public Finance

A discussion of taxation and expenditure policies with an emphasis on Canada. Micro-economic effects of these policies will be examined in detail.

Text: To be announced.

I. Schaafsma. September-December only. (3-0)

#### ECON 326. (1 1/2) Fiscal Policy and Related Issues

A discussion of fiscal and debt-management policy. This course would examine the historical record of Canadian policy since the depression and theoretical possibilities for the present and future.

Text: To be announced. Term paper.

J. Schaafsma. January-April only. (3-0)

## ECON 330. (1 1/2) Environmental Economics

Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of man's use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources.

Prerequisite: Economics 100 or 200, or permission of the Department.

Not open to those students having credit for Econ. 430.

Text: To be announced.

L. Laudadio. September-December only. (3-0)

#### ECON 340 (formerly 341). (1 1/2) Statistical Inference

Probability Theory, Sampling Theory, Confidence Limits, Tests of Hypotheses, Regression and Correlation. Not open to students who have credit for Statistics 253.

Prerequisite: Economics 240 and Mathematics 130, or 151\* and 102\* or permission of the Department, (\*Formerly Mathematics 140.)

Text: To be announced.

I. Schaafsma.

September-December only. (3-0)

#### ECON 350. (11/2) Soviet Economics

An examination of the functioning of Soviet-type economic systems, the principles of economic planning and coordination, and the role of Marxian economic theory. The major emphasis is on the Soviet Union; China and the Soviet-type economies of Eastern Europe are studied briefly.

Text: To be announced. Supplementary reading.
(Not offered 1976-77.)

January-April only. (3-0)

#### ECON 402 (formerly 401). (11/2) History of Economic Thought

A survey of economic thought from pre-Smith to Keynes. This course is designed to provide an overview of the ideas of major thinkers in this period. Not open to students who have credit for Economics 401 (3).

Prerequisites: Economics 200

Texts: Taylor, A History of Economic Thought; Newman, Gayer, Spencer, Source Readings in Economic Thought.

Members of the Department.

(May not be offered 1976-77.) September-December only. (3-0)

## ECON 403 (formerly 401). (1 $\frac{1}{2}$ ) Selected Topics in the History of Economic Thought

In-depth study of the economic models of Smith, Ricardo, Marx, Marshall, and Keynes. A seminar paper written by the student is an essential part of the course. Not open to students who have credit for Economics 401 (3).

Prerequisites: Economics 402.

Text: To be announced.

Members of the Department.

(Not offered 1976-77.)

January-April only. (3-0)

#### ECON 405. (3) International Economics

Theory of international trade; comparative costs and general equilibrium theory; balance of payments; international stability; trade policy; international aspects of economic development of under-developed countries.

Text: To be announced. Supplementary reading.

I.-D. Pal. (3-0; 3-0)

## ECON 406. (1 $\frac{1}{2}$ ) Monetary Theory and Policy

The examination of the comparative efficacy of the instruments of monetary control; the objectives and effectiveness of monetary policy; the theory of the demand for money; money supply theory; and international monetary problems.

Prerequisite: Economics 303 or 301 or permission of the Department. Economics 305 is recommended.

Text: To be announced. Supplementary reading.

K. Avio. January-April only. (3-0)

#### ECON 410. (3) Principles and Problems of Economic Policy

Consideration of agricultural policy, monetary policy, fiscal policy, commercial policy, anti-monopoly policy, labour policy, social security and economic planning. An essay will be assigned during the session on a topic dealing with an aspect of government economic policy in Canada.

Text: To be announced.

J. C. H. Jones.

(3-0; 3-0)

### ECON 412. (11/2) Urban Economics

Application of economic theory to the form and structure of urban areas. External effects and public policy in the urban context. Topics include: intraurban location, systems of cities, economic function and the specialization within the city, the economics of urban transport, housing and public services.

Text: To be announced. Term paper.

G. R. Walter.

January-April only. (3-0)

#### ECON 414. (11/2) Regional Economics

Consideration of economic factors controlling regional income and population growth. The problem of regional economic disparities. Models for evaluating and forecasting subnation economic growth. Topics include: regional accounting, migration, comparative advantage, application of inputoutput, economic base, industry complex models, and associated public policies

Text: To be announced. Term paper.

J. A. Schofield.

September-December only. (3-0)

#### ECON 420. (1 1/2, formerly 3) Theory of Economic Development

Theories of economic development; domestic policies for development; investment criteria; planning and financing economic development; the role of foreign trade and aid in economic development.

Text: To be anounced. Supplementary reading.

I.-D. Pal.

January-April only. (3-0)

(Not offered 1976-77; intend to offer 1977-78.)

#### ECON 421. (11/2) European and International Economic History

The rise of capitalism and the Industrial Revolution especially in Western Europe. The British experience and comparative rates of growth in European countries, with some attention given to the transference of industrialization techniques to non-European countries.

Text: To be anounced.

(May not be offered 1976-77.)

January-April only. (3-0)

#### ECON 430. (3) Economics of Natural Resources and Environmental Policy

The application of economic theory to the use and exploitation of natural resources. A discussion of economic theory in relation to problems of allocation, distribution, stability, and economic growth as they relate to resource management is undertaken, followed by an investigation of particular problems in various resource industries, and questions relating to environmental quality. Particular attention is paid to analytical questions concerning resource management to achieve increased economic welfare and to problems of utilizing resources over time.

Prerequisite: Economics 300 or 302, or permission of the Department.

Text: To be announced. Term papers First and Second terms.

G. R. Walter.

(3-0; 3-0)

#### ECON 440. (3) Mathematical Economics

The use of mathematics to derive economic theory. Topics include optimization theory for the consumer and the firm using calculus and linear programming, input-output analysis and dynamics. Very little outside reading is required. Problems are assigned every week.

Prerequisite: Mathematics 240, or permission of the Department.

Text: A. C. Chiang, Fundamental Methods of Mathematical Economics.

D. G. Ferguson.

(3-0;3-0)

#### ECON 445. (3) Econometrics

The application of statistical methods in economics illustrated by representative empirical studies. Problem assignments will be devoted to data preparation and the use of the computer.

Prerequisites: Economics 340 and 341 and either Mathematics 240 or 100, 101 and 110.

Text: To be announced.

L. I. Bakony.

(3-0; 3-0)

### ECON 470. (3) Honours Seminar

NOTE: For Honours students only.

#### ECON 495. (3) Directed Studies

An elective course for selected Honours students which may, with the permission of the Department, be substituted for another elective course numbered above 400.

Members of the Department.

#### COMMERCE

#### COMM 151. (11/2 formerly 3) Fundamentals of Accounting

The analysis and communication of financial events and an examination of the accounting postulates underlying the preparation and presentation of financial statements.

Prerequisite: Commerce 190 or permission.

Text: To be announced.

January-April only. (3-0)

### COMM 190. (11/2) Fundamentals of Business

An examination of the legal, financial and organizational structure of business enterprise with particular respect to the Canadian environment. Not open to students with 3 units credit in Commerce 151.

Prerequisite: Second-year standing.

September-December only. (3-0)

## **GRADUATE COURSES**

(Consult Department for courses offered in any given year.)

### ECON 500. (11/2) Micro Economic Theory

Analysis of decision making by consumers and firms; study of equilibrium positions in different market structures: welfare economics; recent contributions to price theory.

#### ECON 501. (11/2) Macro Economic Theory

Macro economic relationships, static and dynamic models, properties of dynamic models, policy analysis with large dynamic models.

#### ECON 505. (1 1/2) International Trade

Selected theoretical issues in international trade, such as trade and relative prices and factor supply, theory of customs unions exchange rate, trade and economic growth, and adequacy of international reserves.

## ECON 506. (11/2) Monetary Theory and Policy

The examination of selected contributions to contemporary monetary theory and policy. Topics to be considered include the integration of value and monetary theory, the theory of demand and supply of money, interest rate and monetary policy.

#### ECON 510. (11/2) Industrial Organization and Public Policy

Seminar in the structure and performance of industrial markets with special emphasis on the problems of maintaining effective competition in

#### ECON 514. (11/2) Regional and Urban Economic Growth

Seminar in anlytical approaches to understanding subnational economic growth including growth poles, comparative advantage, capital and labour migration and related topics. Methods of impact analysis and forecasting Regional and urban disparities in wealth and income and approaches to their alleviation.

Prerequisite: Elementary calculus and macro economic theory.

#### ECON 515. (11/2) Labour Economics

Seminar in labour economics and collective bargaining, including wage and employment theory, collective bargaining systems, theory of the labour movement, and public policy in collective bargaining.

## ECON 520. (11/2) Economic Development

Seminar to examine selected issues in the theoretical models of economic development, factors in economic development, strategy of economic planning, and financing of economic development.

### ECON 521. (11/2) Economic History

Seminar in selected topics in economic history including the approach and contributions of "the new economic history," theories of long-run economic growth, history and analysis of long-run economic growth in selected countries, and new work in the literature.

### ECON 525. (11/2) Public Finance and Fiscal Policy

Seminar in selected topics in fiscal policy and public finance including the incidence and effects of taxation, government expenditure programmes and public debt operations.

#### ECON 530. (1 1/2) Economics of Natural Resources

Seminar in the economics of natural resources including a survey of relevant theoretical literature and selected topics covering problems in resource industries.

#### ECON 540. (11/2) Quantitative Methods

Review of basic statistical inference techniques with extensions relevant to economic analysis. Application to specific problems.

Prerequisite: Economics 340 or equivalent.

#### ECON 545. (11/2) Econometrics

Seminar in single equation and simultaneous equation techniques and applications. Simulation experiments with large econometric models. Optimal decision procedures.

Prerequisite: Economics 445 or equivalent.

#### ECON 550. (1 1/2) Soviet Economics

The structure and functioning of Soviet and Eastern European economies. Theory and practice of socialist pricing; planning; economic development; problems of measurement and comparisons with Western economies.

#### ECON 595. (1 1/2) Directed Studies

May be offered in areas A or B, each for  $1\frac{1}{2}$  units. Students may elect to take either or both in any one Winter Session.

ECON 599. (3) Thesis

## DEPARTMENT OF ENGLISH

- David L. Jeffrey, B.A. (Wheaton), M.A., Ph.D. (Princeton), Associate Professor and Chairman of the Department.
- Roger J. Bishop, B.A., Dip.Ed. (Brit. Col.), B.L.S., M.A. (Tor.), Professor Emeritus.
- Roy F. Leslie, B.A., M.A., Ph.D. (Manchester), Professor.
- Frederick Mayne, B.A., Ph.D. (Witwatersrand), Professor.
- John H. Mitchell, B.S. (Bowdoin College), A.M. (Harvard), Visiting Professor (1976-77).
- John D. Peter, M.A. (Cantab.), B.A., LL.B., D.Litt. (S. Africa), D.Litt. (Rhodes), Professor.
- William Benzie, M.A., M.Ed., Ph.D. (Aberdeen), Associate Professor. (On study leave 1976-77.)
- Edward I. Berry, A.B. (Wesleyan), M.A., Ph.D. (Calif., Berkeley), Associate Professor.
- Michael R. Best, B.A., Ph.D. (Adelaide), Associate Professor.
- Charles Doyle, B.A., M.A. (N.Z.), Ph.D. (Auckland), Associate Professor.
- M. D. Faber, B.A. (Chicago), M.A., Ph.D., (Calif., Los Angeles), Associate Professor.
- Patrick J. Grant, B.A. (Queen's, Belfast), D.Phil. (Sussex), Associate Professor.
- John G. Hayman, B.A., M.A. (Oxon.), M.A. (Cornell), Ph.D. (Northwestern), Associate Professor.
- Anthony W. Jenkins, M.A. (Cantab.), Ph.D. (Calif., Berkeley), Associate Professor, Director of Honours Programme.
- Carol V. Johnson, B.A. (Coll. of St. Catherine), M.A. (Marquette), M.F.A. (Iowa), Ph.D. (Bristol), Associate Professor.
- Patricia J. Köster, B.A. (Brit. Col.), M.A. (Calif., Berkeley), Ph.D. (London), Associate Professor. (On leave of absence 1976-77.)
- Burton O. Kurth, B.A. (Brit. Col.), Ph.D. (Calif., Berkeley), Associate Professor.
- Robert G. Lawrence, M.A. (New Brunswick), Ph.D. (Wisconsin), Associate Professor.
- Samuel L. Macey, B.A. (Brit. Col.), Ph.D. (Wash.), F.W.S.O.M., Associate Professor.
- G. Grant McOrmond, C.D., M.A. (Sask.), Associate Professor.

- Colin J. Partridge, B.A. (Nottingham), Cert. Ed. (London), Ph.D. (Nottingham), Associate Professor.
- Jarold M. Ramsey, B.A. (Ore.), Ph.D. (Wash.), Visiting Associate Professor (1975-76).
- Herbert F. Smith, A.B., A.M. (Boston), Ph.D. (Rutgers), Associate Professor. (On leave of absence 1976-77.)
- Henry E. Summerfield, B.A., M.A. (Oxon.), M.Litt. (Durham), Associate Professor.
- David S. Thatcher, B.A. (Cantab.), M.A. (McMaster), Ph.D. (Alta.), Associate Professor and Director of Graduate Programme.
- Lionel Adey, B.A., M.A. (Birmingham), Ph.D. (Leicester), Cert.Ed. (London), Assistant Professor. (On study leave 1976-77.)
- Norman W. Alford, B.A. (London), Ph.D. (Texas), Assistant Professor.
- Thomas R. Cleary, B.A. (Queens Coll.), M.A., Ph.D. (Princeton), Assistant Professor.
- John D. Cox, B.A. (Hope College), M.A., Ph.D. (Chicago), Assistant Professor.
- Anthony S. G. Edwards, B.A. (Reading), M.A. (McMaster), Ph.D. (London), Assistant Professor. (On study leave 1976-77.)
- Anthony B. England, B.A., M.A. (Manchester), Ph.D. (Yale), Assistant Professor.
- George H. Forbes, B.A. (Brit. Col.), M.A., Phil.M. (Tor.), Assistant Professor.
- Bryan N. S. Gooch, B.A., M.A. (Brit. Col.), Ph.D. (London), A.R.C.T. (Tor.), L.T.C.L., F.T.C.L. (London), Assistant Professor. (On study leave 1976-77.)
- Velma L. Gooch, B.Ed., M.A. (Alta.), Ph.D. (Manchester), Assistant Professor.
- Victor A. Neufeldt, B.A. (Brit. Col.), Ph.D. (Ill.), Assistant Professor and Director of the Language Programme.
- Constance M. Rooke, B.A. (Smith Coll.), M.A. (Tulane), Ph.D. (N. Carolina), Assistant Professor.
- Norma Rowen, B.A. (Oxon.), Ph.D. (Calif., Berkeley), Assistant Professor.
- Robert M. Schuler, B.A. (Bellarmine), M.A., Ph.D. (Colorado), Assistant Professor.
- Terry G. Sherwood, B.A. (Ore.), M.A., Ph.D. (Calif., Berkeley), Assistant Professor.
- Nelson C. Smith, A.B. (Princeton), M.A.T. (Oberlin), Ph.D. (Wash.), Assistant Professor, Acting Director of Major and General Programmes (1976-77).
- Rosemary Sullivan, B.A. (McGill), M.A. (Conn.), Ph.D. (Sussex), Assistant Professor.
- Reginald C. Terry, B.A. (Leicester), M.A. (Bristol), Ph.D. (London), Assistant Professor.
- Diane Tolomeo, B.A. (Rochester), M.A., Ph.D. (Princeton), Assistant Professor. (On leave of absence 1976-77.)
- Bruce E. Wallis, B.A. (Rutgers), M.A. (Harvard), Ph.D. (Princeton), Assistant Professor.
- Trevor L. Williams, B.A., M.A. (Manchester), Ph.D. (Wales), Assistant Professor.
- Edward R. Zietlow, B.A. (Dakota Wesleyan), M.A. (Boston), Ph.D. (Wash.), Assistant Professor.
- R. Clark Cook, B.A. (Brit. Col.), Sessional Lecturer, Correctional Education Programme (1975-76).
- Theo Q. Dombrowski, B.A. (U. of Vic.), M.A. (Dalhousie), Ph.D. (London), Sessional Lecturer (1975-76).
- Ina G. Ferris, B.A., M.A. (Tor.), Ph.D. (Calif., Los Angeles), Sessional Lecturer (1975-76).
- Jane L. Gooch, B.A. (Brit. Col.), M.A., Ph.D. (Tor.), Sessional Lecturer (1975-76).
- Brian L. Grafton, B.A. (Brit. Col.), M.A., Ph.D. (McMaster), Sessional Lecturer (1975-76).
- Alexander N. Hutchison, M.A. (Aberdeen), Sessional Lecturer (1975-76).
- Corrine Y. Taylor, B.A. (Brit. Col.), M.A., Ph.D. (Wash.), Sessional Lecturer (1975-76).
- Hetty Clews, B.A. (Birm.), M.A. (Sask.), Part-time Sessional Lecturer (1975-76).
- Dawn L. Hood, A.B. (Rochester), M.A. (Ball State), Part-time Sessional Lecturer (1975-76).

Marion C. Jenkins, B.A. (Boston), M.A. (Calif., Berkeley), Part-time Sessional Lecturer (1975-76).

Audrey J. Neufeldt, B.A. (Brit. Col.), M.A. (Wash.), Part-time Sessional Lecturer (1975-76).

Esther M. Robertson, B.A. (McGill), M.A. (Brit, Col.), Part-time Sessional Lecturer, Correctional Education Programme (1975-76).

Judith Terry, B.A. (Leicester), M.Phil. (London), Part-time Sessional Lecturer (1975-76).

Rose-Marie Silkens, B.A. (U. of Vic.), M.A. (Brit. Col.), Administrative Assistant

## **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and Ph.D. degrees, see page 148; for graduate courses, see page 57.

#### **PREREQUISITES**

University regulations state that all students entering the University for the first time are required either (i) to present a passing grade in the British Columbia Scholarship Examinations in English Composition or, if transferring from another post-secondary institution, a grade of A in the equivalent of English 111 or a passing grade in a course equivalent to two of the following: English 111, 115, 121, 122; or (ii) to pass the University's Qualifying Examination in the use of English. The Qualifying Examination may be written during the period June 14 to August 27 at the English Department in the Sedgewick Building, Monday through Friday, between the hours of 9:00 a.m. and 2:00 p.m. Alternatively, students may sit the examination on the Saturday before Registration Week at the time and place specified in the instructions issued by the Records Office. The examination lasts two hours and will consist of one essay to be chosen from a wide list of subjects. It is designed to test the student's proficiency in writing the English language. The results will be posted before registration. Students who fail the Qualifying Examination will register in English 111 and one of English 115, 121, 122. Students who fail the Qualifying Examination and whose first language is not English may be required to take Linguistics 099 — see page 11. Students who pass the examination or who have passed the British Columbia Scholarship Examination in English Composition, and who wish to pursue studies in English will normally register in English 121 and 122.

No student may register for more than 11/2 units of the First Year English in the first term. However, students may register in September for 3 units of First Year English to be taken in the second term, provided permission is obtained from the Director of the Language Programme.

Two of English 115, 121, 122 (or the equivalent) are prerequisites to all English courses except that, in special circumstances and with the permission of the Department, students who have distinguished themselves in English 115 may be allowed to proceed to Second Year English courses. Students who pass a Qualifying Examination, or who are exempted from it, may plan to take English 115 as an elective, but not English 111.

Courses in the English Department do not, in general, require pre-

requisites, but courses at the 300 level and above are not open to First Year students. Second Year students may take courses at the 300 and 400 levels, but will be required to meet the normal standards of senior courses.

Every student is required to own a good dictionary, e.g., The Concise Oxford Dictionary, The American College Dictionary, Webster's Collegiate Dictionary, Dictionary of Canadian English, The Senior Dictionary, The Random House Dictionary of the English Language (College Edition).

#### GENERAL

Students wishing to take English as one of the fields of concentration in their General programme should take in their First Year: 3 units from English 115, 121, or 122; Second Year: English 200, 201, 203, 204, 205, 210 or 238; Third and Fourth Years: a total of 9 units in English courses numbered 350 and above. (English 400 is not acceptable.) Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with departmental advisors.

#### MAJOR

Course Structure for English Majors:

- At least one course (3 units) from: 200, 201, 203, 204, 205, 210, 238, Students planning to major in English are strongly encouraged to take English 200, or 204/205.
- (b) At least 3 units from: 351, 352, 413, 419.
- (c) At least 11/2 units in addition to (b) requirement, from courses in literature before 1700.
- At least 11/2 units from courses in literature covering the period 1700-1800.
- (e) At least 11/2 units from literature 1800-1900.

Total required units to be chosen from the structure beyond Second Year:  $7\frac{1}{2}$  units, plus an additional minimum of  $7\frac{1}{2}$  units of electives in Third and Fourth Year English, not including English 400.

All students wishing to major in English must demonstrate an adequate reading knowledge of a language other than English, acceptable to the Department. This requirement may normally be satisfied either by courses at the Second Year level, or by authorized translation tests.

The Honours Programme allows students of proven ability to study English Language and Literature more comprehensively than is possible in the General or Major programmes. Courses range more widely over the whole field of English studies, and the approach within the special Honours courses is more intensive. These classes are normally small enough to meet as seminar groups. Individual tutors are assigned to offer guidance on each student's requirements. Students who take a special interest in English Language or Literature, or who are contemplating post-graduate study in English, are strongly advised to enrol in the Honours rather than in the General or Major programmes. Those who contemplate an Honours programme are strongly advised to take English 345 in their Second Year, if possible; otherwise English 345 must be taken in their Third Year.

Prerequisites for admission to Third Year Honours include a First or high Second Class mark in English 200 or in English 204 and/or English 205, and the approval of the Chairman of the Department. In the last three years candidates will offer at least 45 units of credit of which 30 must be English

courses as specified below.

The programmes of Honours students are subject to the approval of the Director of Honours Programmes, and the choice of electives is subject to modification in the light of a student's entire programme. 24 units must be taken from English courses numbered 345 and above (English 400 is not acceptable) and must include 6 units consisting of the following English courses: 440: The History of the English Language; 445 and 446: Honours Seminars; 499: Graduating Essay or Directed Reading. The programme must also include Chaucer or at least 3 units of medieval literature, Shakespeare, at least 11/2 units in the Renaissance, and 3 units each in the 18th and 19th centuries. Special counselling for students entering the Honours programme, as well as for those already enrolled in it, will be offered at duly announced times in the Second Term and before and during Registration.

At the end of the Fourth Year there will be an interview, at which students may be required to defend their Graduating Essay or discuss the work

undertaken for their Directed Reading project.

All students wishing to honour in English must demonstrate an adequate reading knowledge of a language other than English, acceptable to the Department. This requirement may normally be satisfied either by courses

at the Second Year level, or by authorized translation tests.

An Honours degree is either first or second class. A first class degree requires a first class graduating average (6.5 and above) and at least a B+ in English 499 (The Graduating Essay). If an Honours student has a first class graduating average but has scored lower than B+ in English 499, the student will be given the option of receiving Second Class Honours or a First Class Major. A second class Honours degree requires a second class graduating average (3.5 to 6.49) with at least a B- in English 499.

#### SUGGESTED ELECTIVES

The Department encourages its students to take elective courses supportive to their General, Major or Honours programmes. In making their choice of electives, students may wish to give special consideration to: Classics 100, 200; History 220; History in Art 120, 221; Philosophy 100, 102; as well as to courses in the literature of other languages.

#### UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April. With the exception of first-year courses and English 200, specific reading lists for each course can be obtained from the instructor or the Department office before or during registration week.

#### FIRST YEAR

Students who pass a qualifying examination (see page 11) may elect to take one or two of English 115, 121, 122 and, after consultation, English 204 or 205. At least 3 units of First Year English is prerequisite to future work in the Department.

### ENGL 111 (formerly one-half of 110). (11/2) Basic Composition

Emphasis will be placed on problems in writing through a close analysis of students' own work and the study of prose essays.

Compulsory for students who fail the Qualifying Examination and open to students who have passed the Qualifying Examination only upon request for transfer from their First Year instructor.

Members of the Department.

September-December. Also January-April. (3-0)

#### ENGL 115 (formerly one-half of 110). (11/2) College Composition

An examination in depth and detail of English prose style. In addition to the study of prose fiction, attention will be paid to the writing and documenting of research papers, to logical thinking in exposition, and to the effective presentation of ideas in exposition.

Members of the Department.

September-December. Also January-April. (3-0)

#### ENGL 121 (formerly one-half of 120). (1 1/2) Literature: Prose Fiction

A study of literary genres, focusing upon the Short Story and the Novel, with attention to the writing of critical essays. Students will be assigned a

minimum of four essays.

Individual instructors, with the option of substituting up to two works of their own choice, will select texts from the following list: Mizener, Modern Short Stories; Timko and Oliver; 38 Short Stories; Dickens, Great Expectations; Eliot, The Mill on the Floss; Faulkner, As I Lay Dying; Hardy, Tess of the d'Urbervilles; James, The Turn of the Screw; Lawrence, Sons and Lovers; Moore, The Lonely Passion of Judith Hearne; Richler, The Apprenticeship of Duddy Kravitz. (This list is subject to change.)

Members of the Department.

September-December. Also January-April. (3-0)

#### ENGL 122 (formerly one-half of 120). (11/2) Literature: Poetry and Drama

A study of literary genres, focusing upon Poetry and Drama, with attention to the writing of critical essays. Students will be assigned a minimum

of four essays

Individual instructors, with the option of substituting up to two works of their own choice, will select texts from the following list: Geddes, Twentieth Century Poetry and Poetics; The Norton Anthology of Poetry (Shorter ed.); Beckett, Waiting for Godot; Brecht, Galileo; Corrigan, ed., Masterpieces of British Drama—the Nineteenth Century; Ibsen, Hedda Gabler; Miller, The Crucible; Pinter, The Caretaker; Reinert, ed., Modern Drama; Shakespeare, Coriolanus, Othello; Sophocles, Oedipus Rex; Stoppard, The Real Inspector Hound. (This list is subject to change.)

Members of the Department.

January-April only. (3-0)

#### SECOND YEAR

#### ENGL 200. (3) British Literature from the Age of Chaucer to the Romantic Period

Special emphasis will be placed on works by Chaucer, Spenser, Marlowe, Shakespeare, Donne, Milton, Dryden, Swift, Pope, Fielding, Johnson, Blake, Wordsworth, Coleridge, Keats, and Austen.

Open to all students, but strongly recommended to those who wish to

major or honour in English.

Texts: The Norton Anthology of English Literature (2 vols.); other texts to be announced.

E. I. Berry, T. R. Cleary, A. B. England, A. W. Jenkins, F. Mayne, T. G. Sherwood, R. Sullivan. (3-0; 3-0)

## ENGL 201. (3) Studies in Modern Literature

The emphasis will be upon themes important in twentieth century literature.

Authors to be studied may include Shakespeare, Joyce, Forster, Fitzgerald, Hardy, Hemingway, Camus, Cary, Beckett, Lawrence, Conrad, Tolkien, Bellow, T. S. Eliot.

N. W. Alford, C. Doyle, M. D. Faber, G. H. Forbes, C. V. Johnson, J. D. Peter, C. M. Rooke, N. Rowen, H. E. Summerfield. (3-0; 3-0)

#### ENGL 203. (3) An Introduction to American Literature

A survey designed both for those who will continue in American studies and those who will not. Emphasis is on the continuity of the American literary tradition. Readings from the set text will be chosen by the instructor and supplemented by additional readings in the major writers such as Whitman, Hawthorne, Twain, Henry James, Faulkner.

Text: To be announced.

C. J. Partridge, N. C. Smith.

(3-0; 3-0)

## ENGL 204. (3) British Literature from Chaucer to Milton

In addition to providing an introduction to the major figures, themes and movements of the period, the course may include an extended study of a special topic. Essays will be required.

Among the major authors to be studied are Chaucer, More, Sidney, Spenser, Marlowe, Shakespeare, Bacon, Donne, and Milton. Texts will be

announced.

Not open to students with credit for English 200.

J. D. Cox. (3-0; 3-0)

#### ENGL 205. (3) British Literature from the Restoration to 1900

In addition to providing an introduction to the major figures, themes and movements of the period, the course will include an extended study of a special topic. Essays will be required.

Among the major authors to be studied are Blake, Swift, Pope, Dryden,

Johnson, Wordsworth and Coleridge.

Not open to students with credit for English 200.

D. S. Thatcher.

(3-0; 3-0)

#### ENGL 210 (formerly 410). (3) Backgrounds to English Literary Tradition

A study of the main currents of thought contributing to late Medieval and Renaissance Literature. The development of literary vocabulary in the Judaeo-Christian tradition.

J. D. Cox.

(3-0;3-0)

#### ENGL 215. (3) The Uses of English Prose

A combined composition-analysis course which pays special attention to the style and methods of non-fiction prose writing. There will be focus on the development and analysis of the students' own writing through numerous and extensive written assignments; considerable time will also be devoted to study of prose techniques. Classes will be limited to 20 students. Not open to students with credit in English 300.

G. H. Forbes, V. L. Gooch, R. G. Lawrence, G. G. McOrmond, J. H. Mitchell, V. A. Neufeldt, R. M. Schuler, E. R. Zietlow. (3-0; 3-0)

## ENGL 238 (formerly 438). (3) Canadian Literature

A general survey of Canadian literature from 1770 to the present, with special emphasis on the literature of the twentieth century. This course will concentrate on major figures and major themes in English Canadian literature and on selected works in translation from French Canada.

R. G. Lawrence, N. C. Smith.

(3-0:3-0)

#### THIRD AND FOURTH YEARS

1½ unit courses are numbered 350 and above for convenience, and are at the same level as upper-division courses numbered 400 and above.

#### ENGL 301. (3) Children's Literature

A survey of children's literature, including sources and development, with emphasis on the study of selected 19th and 20th century works. The course is designed to develop critical awareness and to extend knowledge of what books are presently available for children and adolescents.

This course and Education 341 offer inter-changeable credit in the Intermediate Language Arts area of the Faculty of Education. English 301 offers credit in the Faculty of Arts and Science only as a free elective, under the conditions specified on page 25 (Courses not recognized in the

Faculty of Arts and Science).

Texts: List available on application to the Department of English.

P. I. Grant.

(3-0; 3-0)

#### ENGL 345 (formerly 245). (3) Practical Criticism

A seminar designed to sharpen reactions to a writer's style, and to examine how the design of his thoughts creates his meaning. Discussions centre upon the way a particular poem, novel or play works in its details and in its overall patterning. Prospective Honours students are strongly advised to take this course in their Second Year. Students will be allowed to select this course only if they have the approval of the Director of English Honours.

A. W. Jenkins, N. Rowen, B. E. Wallis.

(3-0; 3-0)

#### ENGL 351 (formerly one-half of 443). (1 1/2) The Canterbury Tales

An introductory study of Chaucer's poetry focusing specifically on The Canterbury Tales.

D. L. Jeffrey.

September-December only. (3-0)

## ENGL 352 (formerly one-half of 443). (1 1/2) Chaucer Studies

A survey of Chaucer's poetry exclusive of The Canterbury Tales, notably Troilus and Criseyde, The Book of the Duchess, The House of Fame, The Parliament of Fowles, and the short poems.

Prerequisite: English 351.

January-April only. (3-0)

#### ENGL 353 (formerly 407 and 444). (11/2) Studies in Medieval English Literature

A study of the major literary works and genres of the medieval period (excluding Chaucer). The course will centre on specific genres (romance, drama, lyric, etc.), at the discretion of the instructor, with annual adver-

This year: Medieval drama. A study of the different forms and staging of early drama in England (liturgical plays, mystery cycles, miracles and interludes).

Text: David Bevington, Medieval Drama.

A. W. Jenkins.

September-December only. (3-0)

#### ENGL 360 (formerly 414). (11/2) Special Studies in Shakespeare

Intensive study of a few plays, with emphasis on related critical issues. Students contemplating this course should have a general knowledge of Shakespeare's work.

This year: Shakespeare and the Imagination.

E. I. Berry.

Ianuary-April only. (3-0)

#### ENGL 361 (formerly 418). (11/2) The Metaphysical Poets

Major emphasis will be on Donne, Herbert, Marvell, Vaughan and Traherne. Special attention will be given to the secular love lyric, as well as to the influence of Christian theology and related philosophical traditions.

T. G. Sherwood.

September-December only. (3-0)

#### ENGL 362. (1 1/2) Special Studies in Renaissance Literature

A study of major literary works and genres of the Renaissance. The course will centre on specific genres (excluding drama) in poetry and prose at the discretion of the instructor, with annual advertisement.

(Not offered in 1976-77; intend to offer 1977-78.) (3-0)

#### ENGL 363. (11/2) Magic, Science & Religion in Renaissance Literature

A study of late sixteenth- and seventeenth-century literature in light of the interrelationships between contemporary magic, science, and theology. A good deal of attention will be paid to this background, but the ultimate purpose of the course is the fuller understanding of the literary texts themselves. Authors to be studied include Marlowe, Shakespeare, Donne, Jonson, Bacon, Browne, Vaughan, Burton, and Milton.

Texts: To be announced.

R. M. Schuler.

September-December only. (3-0)

#### ENGL 364 (formerly 411). (1 $\frac{1}{2}$ ) Elizabethan and Jacobean Drama

Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton and Ford.

M. R. Best.

September-December only. (3-0)

#### ENGL 370 (formerly 421). (1 1/2) Blake and the Age of Sensibility

Readings in Thomson, Collins, Gray, Cowper and Burns will lead up to a study of William Blake.

H. E. Summerfield.

September-December only. (3-0)

## ENGL 371 (formerly 422). (1 $\frac{1}{2}$ ) Restoration and 18th Century Drama

A study of the major types of drama: Restoration comedy and tragedy, heroic drama, "laughing and sentimental" comedy of the 18th century, ballad-opera, opera, burlesque, bourgeois tragedy.

Texts: To be announced.

H. E. Summerfield.

January-April only. (3-0)

#### ENGL 372. (1 1/2) Special Studies in 18th Century Literature

A study of a major aspect of literature in the century. The specific focus of the course will be determined by the instructor and advertised annually.

(Not offered 1976-77.) (3-0)

#### ENGL 380. (1 1/2) Special Studies in the Literature of the United States

A study of American literature which will focus attention on a specific theme, problem, genre or author at the discretion of the instructor, and advertised annually.

This year: Saul Bellow. The course will trace the development of Bellow's vision, focusing primarily upon the image of man. Required reading will be: The Dangling Man, The Victim, The Adventures of Augie March, Seize the Day, Henderson the Rain King, Herzog, Mr. Sammler's Planet, and Humboldt's Gift. Student reports on major criticism will also be required.

E. R. Zietlow.

January-April only. (3-0)

#### ENGL 385. (11/2) Studies in 19th Century English Literature

This year: A study of the role of the artist in Victorian England.

In the Victorian era, a recognition of the moral and social responsibility of the arts both co-exists and conflicts with a hedonistic or individualistic aesthetic. Consequently, the artists adopt a variety of stances — as prophet, social reformer, craftsman, refuge seeker, etc. The position of the artist will be explored by a consideration of such writers as Tennyson, Carlyle, Ruskin, the pre-Raphaelites, Morris and Pater.

Texts: a reading list is available on request.

I. G. Hayman.

September-December only. (3-0)

#### ENGL 386 (formerly part of 431). (11/2) Victorian Poetry and Thought I

Studies in Tennyson and Arnold, with additional readings from such prose writers as Mill, Carlyle, and Newman.

I. G. Havman.

January-April only. (3-0)

#### ENGL 387 (formerly part of 431). (11/2) Victorian Poetry and Thought II

Studies in Browning, Hopkins and the Pre-Raphaelite poets, with additional readings from such prose writers as Carlyle, Ruskin, Pater, and Morris.

V. L. Gooch.

September-December only. (3-0)

#### ENGL 388. (1 1/2) Special Studies in 20th Century British Literature

A study of a specific theme, problem, or author of the period. The specific topic will be determined by the instructor and advertised annually.

This year: James Joyce. The course will attempt to elucidate, by means of detailed explication, some of the main themes of Ulysses. Required reading will include Dubliners, A Portrait of the Artist as a Young Man, and Homer's Odyssey. Recommended reading will include Richard Ellmann's James Joyce and Stuart Gilbert's James Joyce's Ulysses.

Not open to students with credit in English 392, 1975-76.

T. L. Williams.

January-April only. (3-0)

#### ENGL 389 (formerly 433). (1 1/2) Anglo-Irish Literature

A study of the literature of the Irish Renaissance.

Texts by all or most of the following authors will be prescribed: W. B. Yeats (as dramatist and poet), James Joyce, John M. Synge, George Moore, James Stephens, Austin Clarke, Frank O'Connor, Standish O'Grady, Sean O'Casey, Lady Gregory and "AE."

(Not offered 1976-77.)

(3-0)

#### ENGL 390 (Linguistics 390). (3) The Growth and Structure of Modern English

A descriptive approach to the structure of Modern English, designed especially for those students who are interested in the application of modern linguistic science, particularly structural and transformational theory, to an understanding of the language. Topics covered will include the following: social and regional dialects and their significance; theories of grammatical analysis; causes of linguistic change; the history of the English language from its beginnings to the present day, including Canadian English.

This course is divided into 3 sections. Section 1 is for those students who have had previous courses in Linguistics. Sections 2 and 3 are for those

students who have had no previous courses in Linguistics.

Texts: See Linguistics 390.

J. F. Kess (Section 01) and other members of the Department of Linguistics. (3-0;3-0)

#### ENGL 391. (11/2) Studies in Literary Genre

This year: Prose fiction of the late 19th and early 20th centuries.

The course will be a discussion of selected fictional works by authors of the late nineteenth and early twentieth centuries. Some emphasis will be placed on the creative process that transmutes experience into fiction, as well as on changing values and developing techniques (for example, spatial form). Parallels will be drawn with contemporary poetry and works of art.

Texts: Hardy, Jude the Obscure; Henry James, Wings of a Dove; Joyce, Ulysses (extracts only); Lawrence, The Rainbow; Morris, News from Nowhere; Woolf, Mrs. Dalloway. Background reading: Barnes, Nightwood; Peters, Victorians on Literature and Art.

V. L. Gooch.

January-April only. (3-0)

#### ENGL 392. (11/2) Studies in a Major Figure

This course is intended to provide opportunities for occasional offerings of single authors who do not justify permanent representation as do Chaucer, Shakespeare, Spenser, and Milton.

This year: Thomas Hardy. An intensive study of the poet-novelist who dominates the last quarter of the nineteenth century and the first quarter of the twentieth century. Particular attention will be paid to Hardy's development as a novelist and to his epic verse-drama, *The Dynasts*.

Texts: Great Short Works, Far from the Madding Crowd, The Return of the Native, The Mayor of Casterbridge, The Woodlanders, Tess of the d'Urbervilles, Jude the Obscure, The Dynasts.

N. C. Smith.

January-April only. (3-0)

#### ENGL 393. (1 1/2) Myth and Literature

An investigation of what happens to a basic myth or legend as it is used and re-used by different writers in various contexts. The specific subject will be determined by the instructor and advertised annually.

(Not offered 1976-77.) (3-0)

#### ENGL 394. (11/2) Thematic Approaches to Literature: I

This year: Women in Literature.

Selected texts will present women in relation to stereotypical conceptions of "a woman's place." The aim of the course will be to examine the relevance of such considerations vis à vis the work of art. Emphasis will be on the nineteenth century novel.

C. M. Rooke.

January-April only. (3-0)

#### ENGL 395. (11/2) Thematic Approaches to Literature: II

This year: Literature and Psychology.

The aim of this course is to enhance the student's appreciation of literature by exploring literary texts along psychological lines. The course will take up such problems as the psychodynamics of literary response, the literary and psychological function of formal structures, the motivation of character, and the relationship of various critical schools to the school of psychological criticism.

Background readings will include works by Freud, Brenner and Guntrip. Literary texts will include works by Chaucer, Shakespeare, Goethe, James, Beckett, and Faulkner.

M. D. Faber.

September-December only. (3-0)

#### ENGL 396. (11/2) Modern Canadian Fiction

A study in depth of selected novels and short stories of the modern period, including the work of major French Canadian authors in translation.

R. G. Lawrence.

September-December only. (3-0)

#### ENGL 397. (11/2) Modern Canadian Drama and Poetry

A study of major poets and dramatists of the modern period, including the work of French Canadian writers in translation.

R. Sullivan.

January-April only. (3-0)

#### ENGL 400. (3) Advanced English Composition

This course offers students practice in the writing and criticism of essays and prose composition in general. Competence in the English language is a prerequisite. This course is not acceptable for General, Major or Honours programmes in English.

Texts: A good dictionary, such as The Concise Oxford, Webster's Collegiate, Random House; Roget's Thesaurus; an appropriate English handbook; a selected book of essays.

J. H. Mitchell. (3-0; 3-0)

#### ENGL 413. (3) Shakespeare Survey

Lectures on the development of Shakespeare's art in the histories, comedies and tragedies.

Texts: To be announced.

M. R. Best, B. O. Kurth. (3-0; 3-0)

#### ENGL 419. (3) Spenser and Milton: The Renaissance Epic

The course concentrates on the major poems of Edmund Spenser and John Milton in relation to the traditions of Epic poetry in Renaissance England.

Texts: To be announced.

P. J. Grant. (3-0; 3-0)

#### ENGL 420. (3) Literature of the Restoration and the Augustan Periods

An examination of the literature of the Restoration and Eighteenth Century in the light of the social, political and economic background against which it develops. Particular emphasis will be placed on Restoration Comedy, Dryden, Pope, Swift and Dr. Johnson.

T. R. Cleary. (3-0; 3-0)

#### ENGL 423. (3) The Beginning of the British Novel in the 17th and 18th Centuries

Main emphasis is placed on the eighteenth century novel — with some attention to the social and intellectual background of the period, when this appears to illuminate the novels.

Texts: Bunyan, Pilgrim's Progress; Desoe, Journal of the Plague Year and Moll Flanders; Richardson, Pamela; Fielding, Shamela, Joseph Andrews, and Tom Jones; Smollett, Roderick Random; Sterne, Tristram Shandy and Sentimental Journey; Johnson, Rasselas; Walpole, Castle of Otranto: Beckford, Vathek; Austen, Northanger Abbey and Sense and Sensibility.

Background reading: Walter Allen, The English Novel, or Ian Watt, The Rise of the Novel.

S. L. Macey. (3-0; 3-0)

#### ENGL 424. (3) The British Novel in the 19th Century

Authors to be studied may include Mary Shelley, Austen, Scott, Brontë, Disraeli, Collins, Dickens, Thackeray, Eliot, Trollope, Meredith, Hardy, Butler, and Stevenson.

V. A. Neufeldt. (3-0; 3-0)

#### ENGL 426. (3) Comparative Studies in North American Literature

The experiences of isolation and constriction in North America have been repeatedly dramatized by novelists and film-makers. The course will consider different projected images of this phenomenon; the difficulties of individuals relating will be seen dramatized against urban anonymity, small town scrutiny and romanticized pastoral community. It is hoped that some definition of contrasting Canadian and American attitudes to similar phenomena will emerge from the study of work from both sides of the border.

Texts include: Dreiser, Sister Carrie; Edith Wharton, Ethan Frome; Ross, As For Me and My House; Anderson, Winesburg, Ohio; Laurence, Jest of God; Malamud, The Assistant, The Fixer; Moore, The Luck of Ginger Coffey; Carrier, Is It the Sun, Philibert?; Roy, Where Nests the Water Hen; Blais, A Season in the Life of Emmanuel; Callaghan, The Loved and the Lost; Ellison, Invisible Man; MacLennan, Two Solitudes; Ringuet, Thirty Acres; Steinbeck, The Grapes of Wrath; Atwood, The Edible Woman.

(Not offered 1976-77.) (3-0; 3-0)

#### ENGL 427. (11/2) Nineteenth Century American Prose and Poetry

A survey of American non-fiction prose and poetry, including Poe's poetry and criticism; the Transcendentalists, with emphasis on Emerson, Thoreau, and Whitman; the Brahmin critics, with emphasis on Holmes, Lowell, Howells, and Jones; and concluding with the poems of Emily Dickinson and the prose of Henry Adams.

(Not offered 1976-77.) (3-0)

#### ENGL 428. (3) American Fiction to 1900

A study of major American fiction in the nineteenth century. The first term will be a survey of the period from Brockden Brown, Cooper and Hawthorne to Crane, Norris and Dreiser; the second term will be an intensive study of the development and achievement of three major figures: Melville, Twain and James.

C. V. Johnson. (3-0; 3-0)

## ENGL 429. (3) Twentieth Century American Fiction

The primary aim of the course is critical study of major texts. The secondary aim is to relate them to the social and intellectual background of the period.

Authors will include: Stein, Anderson, Hemingway, Fitzgerald, Faulkner, Steinbeck, Penn Warren, Mailer, Ellison, Baldwin, Bellow, Malamud, Barth, Styron and Vonnegut.

E. R. Zietlow. (3-0; 3-0)

### ENGL 430. (3) The Romantic Period (1790-1830)

Chiefly Wordsworth, Coleridge, Byron, Shelley and Keats. Some attention is paid to the prose writers of the period.

A. B. England. (3-0; 3-0)

#### ENGL 434. (3) British Poetry from 1914 to the Present Day

This course will include discussion of the main poetic movements of the period, together with explanations of the work of individual poets, including Wilfred Owen, T. S. Eliot, David Jones, Dylan Thomas, W. H. Auden, W. B. Yeats, D. H. Lawrence, Hugh MacDiarmid, and others.

D. S. Thatcher. (3-0; 3-0)

#### ENGL 435. (3) Modern American Poetry

Detailed study of the poetry of Pound, Stevens, W. C. Williams and the Black Mountain poets (Charles Olson, Robert Creeley, Robert Duncan, Denise Levertov, Paul Blackburn), and selected studies from the following: Hart Crane, Marianne Moore, Theodore Roethke, John Berryman, Robert Lowell, H. D., John Crowe Ransom, Allen Tate, Frank O'Hara, Gary Snyder, Allen Ginsberg, Robert Bly, and Jack Spicer.

C. Doyle. (3-0; 3-0)

#### ENGL 436. (3) 20th Century British Fiction

Close study of one or more of the works of the prominent writers: Conrad, James Joyce and D. H. Lawrence, and some of their contemporaries and successors. Emphasis is critical rather than historical. Essays are required and students are urged to form their own judgments with little reference to the works of critics.

The majority of the texts are to be announced and will include some of the following authors: E. M. Forster, Virginia Woolf, Aldous Huxley, Evelyn Waugh, Graham Greene, Joyce Cary, Samuel Beckett, Angus Wilson, Alan Sillitoe, Kingsley Amis, William Golding.

J. D. Peter, T. L. Williams. (3-0; 3-0

#### ENGL 437. (3) British and American Drama Since World War I

A study of the play as a literary form and an examination of styles, techniques, themes and moods which have been explored in twentieth-century drama, including a brief historical survey of the 19th century theatre. Some attention will be paid to the techniques of acting and direction, theatre design, and audience requirements which have influenced the playwright; however, this is not a practical theatre course. Essay topics will encourage development of the student's own critical ability. Throughout, concentration will be on the text rather than on the works of critics.

Texts: Ibsen, The Wild Duck; Strindberg, Miss Julie; Shaw, Major Barbara, Heartbreak House; O'Casey, Juno and the Paycock; Coward, Private Lives; Auden, The Ascent of F.6; O'Neill, The Emperor Jones, The Iceman Cometh; Rice, The Adding Machine; Odets, Awake and Sing; Anderson, Winterset; Eliot, The Cocktail Party; Miller, A View from the Bridge; Williams, The Glass Menagerie; Beckett, Waiting for Godot; Wesker, Roots; Delaney, A Taste of Honey; Behan, The Quare Fellow; Osborne, Look Back in Anger; Bolt, A Man for All Seasons; Arden, Sergeant Musgrave's Dance; Pinter, The Caretaker, The Homecoming; Albee, Who's Afraid of Virginia Woolf?; Joe Orton, Loot; Stoppard, Rosenkrantz and Guildenstern are Dead.

Background reading: Brecht, The Caucasian Chalk Circle; Chekov, Uncle Vanya; Ionesco, The Bald Soprano.

F. Mayne, R. C. Terry. (3-0; 3-0)

## ENGL 439. (3) Commonwealth Literature

The course offers an introduction to the literature of new and emergent countries. It will discuss problems of regionalism, immigration, native rights and national myths as processes of self-definition. Works from Australia, New Zealand, the Caribbean and sub-Saharan Africa will be studied; comparison will be made with aspects of Canadian cultural development.

Texts include: Keneally, Bring Larks and Heroes; Stow, To the Islands; White, Riders in the Chariot; Mulgan, Man Alone; Sargeson, That Summer; Naipaul, A House for Mr. Biswas; Achebe, Things Fall Apart; Okara, The Voice; Ngugi, Weep Not Child.

C. J. Partridge. (3-0; 3-0)

## ENGL 440. (11/2) The History of the English Language

A survey of the development of the English Language from its Germanic origins to the 19th century, with particular reference to semantic, etymological, phonetic, morphological and syntactic modifications of primary importance to an understanding of English literature.

Prerequisites: Honour standing in Third or Fourth Year.

Texts: A. C. Baugh, A History of the English Language.

R. F. Leslie. September-December only. (3-0)

## ENGL 441. (3) Old English Literature

A study of the language and major literary texts of the Anglo-Saxons, including Beowulf.

R. F. Leslie. (3-0; 3-0)

## ENGL 445 (formerly one-half of 446). (1 ½) Honours Seminar. The History of English Prose Style

A historical and critical survey of English prose style from Malory to the present day. This course illustrates, through the study of representative prose passages, the interplay between the mind of the writer and the age he lives in.

Not open to students with credit for English 446 (3).

E. I. Berry. January-April only. (3-0)

#### ENGL 446. (1 1/2 formerly 3) Third Year Honours Seminar

A seminar in the history of critical theory, with a study of its relation in practice to specific genres and styles.

J. G. Hayman. September-December only. (3-0)

#### ENGL 448. (11/2) Special Studies in Canadian Literature

A study of a major theme, problem, genre or author in Canadian Literature, determined by the instructor and advertised annually.

(Not offered 1976-77.) (3-0)

## ENGL 490. (1 1/2, formerly 3) Directed Reading in English

A specified reading project in some area of English literature to be determined by the student and instructor; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Majors or Honours, and the Chairman of the Department. (3-0)

## ENGL 491 (formerly one-half of 490). (1 ½) Directed Reading in English

Further supervised study in some area of English literature; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Majors or Honours, and the Chairman of the Department. (Note: Persons who have received 3 units of credit for English 490 prior to 1976-77 will not be allowed to take English 491).

#### ENGL 499. (11/2) Graduating Essay or Directed Reading Project in Honours

The graduating essay or directed reading project will be done under the guidance of an individual tutor assigned in Third and Fourth years.

Prerequisite: Honour standing in Fourth year. (0-0-2; 0-0-2)

#### **GRADUATE COURSES AND SEMINARS**

(Not offered 1976-77.)

All courses except 500 and 501 are Variable Content.

ENGL	500.	(1 1/2 formerly 3)	Introduction to Bibliography and Methods of	
			Research	(3-0)

ENGL	501 (formerly one-half of 500).	(1 1/2)	Introduction to Research and	
LITOL	sor (ronnerry one-nam or soo).	1. 721	Criticism	(3-0)

<b>ENGL</b>	503. (11/2)	Special Studies: I	(3-0)

## ENGL 511 (formerly one-half of 510). (1 $\frac{1}{2}$ ) Studies in Old English Literature: II (3-0)

ENGL 521 (formerly one-half of 520). (1 
$$\frac{1}{2}$$
) Studies in Renaissance Literature: II (3-0)

ENGL 530. (1 
$$\frac{1}{2}$$
 formerly 3) Studies in the Literature of the 17th Century: I (3-0)

ENGL	531 (formerly one-half of 530). (1½) Studies in the Literature of the 17th Century: II	(3-0)
ENGL	540. (1 $\frac{1}{2}$ formerly 3) Studies in the Literature of the 18th Centur	y: I (3-0)
ENGL	541 (formerly one-half of 540). (1 $\frac{1}{2}$ ) Studies in the Literature of th 18th Century: II	(3-0)
ENGL	550. (1 $\frac{1}{2}$ formerly 3) Studies in the Literature of the 19th Century	y: I (3-0)
ENGL	551 (formerly one-half of 550). (1 $\frac{11}{2}$ ) Studies in the Literature of the 19th Century: II	ne (3-0)
ENGL	560. (1 $\frac{1}{2}$ formerly 3) Studies in the Literature of the 20th Centur	y: I (3-0)
ENGL	561 (formerly one-half of 560). (1 ½) Studies in the Literature of the 20th Century: II	ne (3-0)
ENGL	570. (1 $\frac{1}{2}$ formerly 3) Studies in American Literature: I	(3-0)
ENGL	571 (formerly one-half of 570). (1 $\frac{1}{2}$ ) Studies in American Literat	ure: II (3-0)
ENGL	580. (1 $\frac{1}{2}$ formerly 3) Studies in Commonwealth Literature: 1	(3-0)
ENGL	581 (formerly one-half of 580). (1 $\frac{1}{2}$ ) Studies in Commonwealth Literature: II	(3-0)
ENGL	585. (1 ½) Studies in Canadian Literature: I	(3-0)
ENGL	586. (1 ½) Studies in Canadian Literature: II	(3-0)
ENGL	590. (1 ½, formerly 3) Directed Reading: I	(3-0)
ENGL	591 (formerly one-half of 590). (1 $\frac{1}{2}$ ) Directed Reading: II	(3-0)
ENGL	599. (3-6) M.A. Thesis	
ENGL	699. (Credit to be determined) Ph.D. Dissertation	

## ENVIRONMENTAL STUDIES PROGRAMME

Programme Chairman, 1976-77: Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Associate Professor, Economics.

The interdisciplinary Environmental Studies Programme is designed to provide the student with a concentration of courses in the area of environmental topics. The programme is structured to serve the interests of students with a general academic interest in environmental topics and students with a professional interest in the environment.

Two approaches to this interdisciplinary programme are offered: a conceptual one, which gives an introduction to environmentally-related areas of a range of disciplines, and a topical one, which focuses a selection of

courses on to a particular problem area.

The requirement basic to both approaches is a Major programme leading to either: a B.Sc. in Biology, Chemistry, Geography, Mathematics, Physics, or Psychology, or a B.A. in Anthropology, Economics, Geography, Philosophy, Political Science, Psychology or Sociology. In addition, the requirements for one of the Conceptual or Topical Options given in the following outlines must be met in order to obtain a notation on the student's permanent record showing completion of the programme.

A student interested in entering the programme should contact a mem-

ber of the Environmental Studies Programme Committee for counselling,

in order to obtain approval of his specific programme.

Marcus A. M. Bell, B.S.F. (Brit. Col.), M.F. (Yale), Ph.D. (Brit. Col.), R.P.F., Associate Professor, Biology.

Martin B. Hocking, B.Sc. (Alta.), Ph.D. (Southampton), Associate Professor, Chemistry.

John M. Michelsen, B.A., M.A., Ph.D. (Wash.), Assistant Professor, Philosophy.

Peter E. Murphy, B.Sc. Econ., Dip. Ed. (London), M.A., Ph.D. (Ohio St.), Assistant Professor, Geography.

Charles E. Picciotto, A.B., M.A., Ph.D. (Calif.), Associate Professor, Physics.

Stephen D. Webb, B.A. (William and Mary), M.A. (George Washington), Ph.D. (Tennessee), Associate Professor, Sociology.

#### TOPICAL OPTIONS

#### URBAN ENVIRONMENT

Requirements:

1. Fifteen units selected from one of the lists below, including Environmental Studies 300, and not forming a part of the Major requirements.

#### SOCIAL SCIENCE EMPHASIS

Anthropology 401 (11/2) Cultural Ecology (Prerequisite: Anthropology 100, or 200, or permission.)

Biology 306 (11/2) Ecology (Prerequisites: Biology 150, or equivalent.)

Biology 316 (1½) Environmental Issues (Prerequisite: 2 years University or equivalent.)

Biology 427 (1½) Population Ecology (Prerequisite: Biology 306, or permission.)

Economics 201 (1½) Principles of Microeconomics (formerly 200) Economics 202 (1½) Principles of Macroeconomics

Economics 330 (1½) Environmental Economics

Economics 412 (11/2) Urban Economics (Prerequisites: Economics 200 or 201 and 202, and permission.)

Economics 414 (11/2) Regional Economics (Prerequisites: Economics 200 or 201 and 202, and permission.)

Environmental Studies 300 (11/2) Environmental Studies

Geography 340 (3) Introduction to Urban Geography

Geography 444 (11/2) Urban Transportation and Land Use Planning (Prerequisite: Geography 340 (formerly 305) or permission.)

Geography 446 (11/2) Development and Planning of the Urban Region (Prerequisite: Geography 340 (formerly 305) or permission.)

Political Science 450 (formerly 454 and 455)(3) An Introduction to Local, Regional and Metropolitan Government and Politics

Political Science 456 (3) Political Institutions and Public Policy

Psychology 350 (3) Environmental Psychology

Sociology 340 (11/2) Demography (Prerequisite: Sociology 100, or per-

Sociology 341 (11/2) Human Ecology (Prerequisite: Sociology 100, or permission.)

## SCIENCE EMPHASIS

Biology 306 (1½) Ecology (Prerequisites: Biology 150 or equivalent.)

Biology 316 (11/2) Environmental Issues (Prerequisite: 2 years University or equivalent.)

Biology 408 (1½) Biology of Pollution (Prerequisites: Biology 203, Biology 206, or permission.)

Chemistry 230 (3) General Organic Chemistry (Prerequisite: Chemistry 120.)

Chemistry 301 (3) Industrial Processes and the Chemistry of Pollution (Prerequisite: Chemistry 120 or 124.)

Chemistry 310 (11/2) Chemical Instrumentation for Environmental Sciences (Prerequisite: Any 200 level course in Chemistry.)

Chemistry 314 (3) Instrumental Analysis (Prerequisites: Chemistry 120, plus Chemistry 230 and permission.)

Economics 330 (11/2) Environmental Economics

Economics 430 (3) Economics of Natural Resources and Environmental Policy (Prerequisites: Economics 200 or 201 and 202, and permission.)

Environmental Studies 300 (11/2) Environmental Studies

Geography 340 (3) Introduction to Urban Geography

Geography 341 (1½) Industrial Geography

Geography 374 (11/2) Biogeography

Geography 375  $(1\frac{1}{2})$  Biospheric Resources (Prerequisite: Geography 374, or Biology 306.)

Statistics 253 (3) Introduction to Probability and Statistics (Prerequisite: Mathematics 130, or Mathematics 102/151.)

Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, 121, or permission.)

#### NATURAL RESOURCE MANAGEMENT

#### Requirements:

- 1. Three units in quantitative concepts and methods, preferably through Mathematics 253 (Introduction to Probability and Statistics), but this requirement may also be met by any of the following: Anthropology 416, Biology 304, Economics 340/341, Geography 421, Psychology 300, Sociology 371/372. This requirement may form a part of the majors programme.
- 2. A minimum of fifteen units, including Environmental Studies 300 and nine units to be selected by taking at least one course from each of the four sections in the core; remainder, if any, to be taken after consultation, and with the approval of a member of the Steering Committee. None of the courses selected are to form part of the Major requirements.

#### Core:

#### Environmental Aspects of Regional Development

Economics 414 (11/2) Regional Economics (Prerequisite: Economics

Geography 343 (11/2) Regional Analysis (Prerequisite: Geography 201 or permission.)

Political Science 450 (3) An Introduction to Local, Regional and Metropolitan Government and Politics

#### (ii) Goal Conflict

Economics 430 (3) Economics of Natural Resources & Environmental Policy (Prerequisite: Economics 200 or 201 and 202.)

Geography 450 (3) Decision-Making in Resources Management (Prerequisite: Geography 350.)

Political Science 456 (3) Political Institutions and Public Policy

#### (iii) Philosophical Aspects

Economics 402 (11/2) History of Economic Thought (Prerequisite: Economics 200 or 201 and 202.)

Biology 316 (11/2) Environmental Issues (Prerequisite: 2 years university experience.)

Philosophy 222 (3) Philosophy of Science

Philosophy 232 (11/2) Moral Problems of Contemporary Society

Philosophy 326 (11/2) Social and Political Philosophy (Prerequisite: Philosophy 100 or 102, or Political Science 300 or permission.

Political Science 304 (11/2) Political Thought from Hobbes to Bentham (This course was offered for the last time in 1973-74.)

(iv) Natural Science Aspects of Environmental Impact

Biology 306 ( $1\frac{1}{2}$ ) Ecology, and Biology 408 ( $1\frac{1}{2}$ ) The Biology of Pollution (Prerequisites: Biology 203 and 206, or permission.) Chemistry 301 (3) Industrial Processes and the Chemistry of Pollu-

tion (Prerequisite: Chemistry 120 or 124.) Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, or 121, or permission.)

NOTES: It is recommended, where the student finds he has electives available over and above the Major and Environmental Studies Programme requirements, that he take courses in French to obtain some facility in the other national language.

Where two courses cannot both be taken for credit in the department, either would be acceptable alternatives for the Environmental Studies Programme providing later year departmental course prerequisites are met.

## CONCEPTUAL OPTION

#### Requirements

- 1. Three units in quantitative concepts and methods, preferably through Math 253 (Introduction to Probability and Statistics), but this requirement may also be met by any of the following: Anth. 416, Biol. 304, Econ. 340/341, Geog. 421, Psych. 300, Soci. 371/372. This requirement may form a part of the Major requirements.
- 2. Fifteen units selected from one of the lists below, including Environmental Studies 300, and not forming a part of the Major requirements.

#### SOCIAL SCIENCE EMPHASIS

Anthropology 401 (1½) Cultural Ecology (Prerequisite: Anthropology 100, or 200, or permission.)

Anthropology 418 or Sociology 418 (1½) Social Change (Prerequisite: Anthropology 100, or 200, or permission.)

Biology 306 (1½) Ecology (Prerequisite: Biology 150 or equivalent.)

Biology 316 (11/2) Environmental Issues (Prerequisite: 2 years University or equivalent.)

Chemistry 120 (3) General Chemistry.

Economics 330 (11/2) Environmental Economics

Economics 412 (11/2) Urban Economics (Prerequisites: Economics 200 or 201 and 202, and permission.)

Economics 414 (11/2) Regional Economics (Prerequisites: Economics 200 or 201 and 202, and permission.)

Environmental Studies 300 (11/2) Environmental Studies

Geography 350 (3) Introduction to Resource Geography (Prerequisites: Geography 203 and 201, 204, or 205, or permission.)

Physics 103 (3) A Survey of Physics

Political Science 350 (3) Public Administration (Prerequisite: Political Science 200 or permission.)

Psychology 350 (3) Environmental Psychology

Sociology 340 (1½) Demography (Prerequisite: Sociology 100 or per-

Sociology 341 (11/2) Human Ecology (Prerequisite: Sociology 100 or permission.)

#### **SCIENCE EMPHASIS**

Anthropology 350 (3) Evolution and Adaptation in Human Populations

Bacteriology 200 (3) Introductory Bacteriology

Biology 306 (1½) Ecology (Prerequisite: Biology 150 or equivalent.)

Biology 316 (1½) Environmental Issues (Prerequisite: 2 years University or equivalent.)

Chemistry 301 (3) Industrial Processes and the Chemistry of Pollution (Prerequisite: Chemistry 120 or 124.)

Economics 201 (11/2) Principles of Microeconomics (formerly 200)

Economics 202 (1½) Principles of Macroeconomics

Economics 330 (11/2) Environmental Economics

Environmental Studies 300 (11/2) Environmental Studies

Geography 350 (3) Introduction to Resource Geography (Prerequisites: Geography 203 and 201, 204 or 205, or permission.)

Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, 121, or permission.)

Political Science 100 (3) Canadian Government and Politics

Sociology 200 (3) Canadian Society

NOTES: It is recommended, where the student finds he has electives available over and above the Major and Environmental Studies Programme requirements, that he take courses in French to obtain some facility in the other national language.

Where two courses cannot both be taken for credit in the department, either would be acceptable alternatives for the Environmental Studies Programme providing later year departmental course prerequisites are met.

#### ES 300. (11/2) Environmental Studies

An interdisciplinary seminar to examine environmental issues. Course will include lectures by visiting speakers and seminar presentations of student projects.

Students to register for audit during all years in the programme, and for credit in their third or fourth year. In the credit year students will be expected to conduct a supervised project and present a seminar based on their study.

Prerequisite: For registered Environmental Studies Programme students only. Open for credit in student's third or fourth year. (0-0-2;0-0-2)

Elaine Limbrick, B.A. (London), D. de IIIe cycle (Poitiers), Associate Professor and Chairman of the Department.

Olivier M. Abrioux, L. ès L., D.E.S. (Paris), Ph.D. (Aberdeen), Professor. Gwladys V. Downes, B.A., M.A. (Brit. Col.), D.U. (Paris), Professor.

Ralph W. Baldner, A.B. (Miami U., Ohio), M.A. (Vanderbilt), Ph.D. (Calif.), Associate Professor.

P. M. H. Edwards, F.T.C.L., A.R.C.M., L.R.A.M. (London), B.A. (Brit. Col.), M.A. (Columbia), M.A. (Harvard), Ph.D. (Penn.) Associate Professor.

David A. Griffiths, B.A., M.A. (Brit. Col.), D.U. (Paris), Associate Professor.

Gérald E. Moreau, B.A. (Man.), M.A. (Laval), D.U. (Poitiers), Associate Professor.

Jennifer R. Waelti-Walters, B.A. (London), L. ès L. (Lille), Ph.D. (London), Associate Professor.

Jeanne E. Adam, L. ès L. (Toulouse), D. de IIIe cycle (Bordeaux), Assistant Professor.

Barrington F. Beardsmore, B.A. (Liverpool), M.A. (McMaster), Ph.D. (Brit. Col.), Assistant Professor.

John C. E. Greene, B.A., M.A. (Alta.), D. de l'Univ. (Grenoble), Assistant Professor.

Jean-Pierre Mentha, L. ès Sc. Soc. (Geneva), M.Ed. (Brit. Col.), Assistant Professor.

Derek J. Turton, B.A. (Leeds), Cert. Ed. (Nottingham), M.Phil. (Leeds), Assistant Professor. (On study leave 1976-77.)

Gérard Gougé, B.A. (Waterloo), Part-time Sessional Lecturer (1975-76).

Mary G. Shelton, B.A. (United Coll.), M.A. (Smith Coll.), Part-time Sessional Lecturer (1975-76).

#### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 148; for graduation courses, see page 62.

## **GENERAL, MAJOR AND HONOURS PROGRAMMES**

Students wishing to take courses at the Third and Fourth Year level are reminded that they must have the prerequisites of the first two years.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. Normally the course numbered 302 must be taken in the Third Year.

An Honours programme in French normally requires a total of 63 units over a four-year period. A comprehensive examination, written and oral, is also required (see French 490). First and second class honours degrees may be awarded. A first class degree requires a first class graduating average and at least a B + in French 490 (Honours Tutorial). A second class degree requires a second class graduating average and at least a C+ in French 490.

A student who fails to meet departmental requirements for First Class standing in the Honours programme but has a First Class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet departmental requirements for Second Class standing but has a Second Class graduating average will be offered a Second Class Major Degree.

Students specializing in French (including Honours), will find that they have sufficient electives to enable them to concentrate in a second field—for example, another language, Classics, English, History, Linguistics. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc. The Department Chairman will be happy to assist students with their selection of courses.

#### PROGRAMMES IN FRENCH

General — First Year: French 180; Second Year: French 285 and 290; Third and Fourth Years: French 302 and six units of French courses numbered above 400.

Major — First Year: French 180; Second Year: French 285 and 290; Third and Fourth Years: French 302 and at least twelve units of French courses numbered above 400.

Honours — First Year: French 180 and one year of Latin (if Latin 12 has not been passed in high school); Second Year: French 285 and 290; Third and Fourth Years: French 302, 402 and 490 and at least 12 more units (French courses numbered above 400), selected with the approval of the Chairman of the Department.

#### **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

#### FREN 100. (3) Beginners' French

An intensive introduction to spoken and written French, with emphasis on oral work. Students from this course who are interested in further studies in French will be integrated into the programmes of the Department, proceeding to either French 160 or French 180, according to their achievement.

Prerequisite: None. Not available to students having credit in French 11 or its equivalent.

Texts: Benamou et Ionesco, Mise en Train; Benamou et Bosworth, Travaux pratiques pour accompagner Mise en Train; Brunetti, Read, Write, Speak French.

J. E. Adam and members of the Department.

(3-1;3-1)

#### FREN 160 (formerly 140). (3) Elementary Composition and Oral Practice

Instruction in French grammar and composition, based on a grammar text and on numerous short readings. Regular compositions will be required. One hour a week will be spent in the language laboratory drilling orally basic grammatical patterns.

NOTE: Not open to those who have completed Grade 12 French.

Prerequisite: French 11.
Texts: To be announced.

Members of the Department.

(3-1; 3-1)

#### FREN 180. (3) French Language and Literature

Study of contemporary French texts, grammar, composition, and pronunciation.

Prerequisite: French 12.

Texts: To be announced.

Members of the Department.

(3-1; 3-1)

#### FREN 260 (formerly 240). (3) Intermediate Composition and Contemporary Literature

Study of contemporary French and French-Canadian texts, and a review of grammar. Regular composition assignments will be required. One hour a week will be spent in seminar-style oral discussion of texts.

Prerequisite: French 160 or equivalent.

Texts: Carlut and Meiden, French for Oral and Written Review; Larousse, French-English, English-French Dictionary; G. Simenon, Maigret et le pendu de Saint-Pholien; G. Bessette, Le Libraire.

Members of the Department.

(Not offered 1976-77.)

(3-1;3-1)

## \*FREN 280. (3) French Language and Literature

This course is given in French. Literary texts are studied and there are frequent written assignments during the term. The formal grammar work consists of a continuous review of essential points in order to aid the student in his writing.

Prerequisite: French 180 or equivalent.

Texts: Carlut and Meiden, French for Oral and Written Review; Sartre, Huis Clos, (Livre de poche); Mauriac, Thérèse Desqueyroux, (Livre de poche); Molière, Le Bourgeois Gentilhomme.

Members of the Department.

(3-0; 3-0)

### FREN 285. (3) A Survey of French Literature

This course, given in French, deals with aspects of the principal periods of French Literature. There will be frequent written work based on the literary texts.

Prerequisite: French 180.

Texts: Molière, Le Malade imaginaire; Racine, Andromaque; Voltaire, Candide; Bernardin de Saint-Pierre, Paul et Virginie; Dufau, Découverte du poème; Mérimée, Carmen; Mauriac, Thérèse Desqueyroux; Camus, La Peste; Dictionnaire moderne français-anglais (anglais-français) Larousse.

E. Limbrick, J. R. Waelti-Walters.

(3-0; 3-0)

## FREN 290. (3) French Oral and Written Practice

This course is given in French and written exercises are expected from the class every week.

Prerequisite: French 180.

Texts: Guillon et Vitols, Le Français contemporain; Dictionnaire moderne français-anglais (anglais-français) Larousse, and other texts to be

J.-P. Mentha and members of the Department.

(3-1:3-1)

## \*FREN 300. (3) French Reading Course

Presentation of basic sentence structures, reading of general and scientific articles, designed to meet the needs of students who have no knowledge of French, but who wish to gain reading comprehension in a special field.

Students registered in First and Second year may not take this course if they have already completed French 11 (or the equivalent) or a higher course; students registered in Third year or a higher year may take the course even though they may have already completed French 11.

Texts: Brunetti, Read, Write, Speak French.

P. M. H. Edwards.

(3-0; 3-0)

## FREN 302. (3) Composition and Stylistics

This course, conducted entirely in French, will require frequent written exercises involving vocabulary and grammar; translations, stylistic commentaries; compositions.

Texts: Le Petit Robert (Société du Nouveau Littré) and others to be announced.

D. A. Griffiths, J.-P. Mentha.

(4-0:4-0)

#### FREN 350. (3) An Advanced Course in French, with Concentration on Oral Work

This course is designed to meet the needs of teachers-in-training and of secondary school teachers of French. Admission requires the consent of the Chairman of the French Department.

Prerequisites: normally French 285 and 290.

Credit will be given as part of a teaching area in the Faculty of Education or as an elective. It can also be taken as an elective in the Faculty of Arts and Science.

Texts: To be announced.

J.-P. Mentha.

(0-6;0-6)

#### FREN 390. (11/2) Honours Tutorial

Honours students only. Students will meet one hour a week with a tutor throughout Third Year to do reading and other work beyond that assigned in lecture courses. There will be a written examination at the end of the

#### FREN 402. (3) Composition, Translation and Stylistics

French composition; French and English translation; Stylistic commentary on French texts.

Prerequisite: French 302.

Texts: Grevisse, Le Bon Usage, grammaire française, (Librairie Payot); Le Petit Robert, (Société du Nouveau Littré).

O. Abrioux. (3-0; 3-0)

## FREN 409. (3) Literature of the Seventeenth Century

A study of the Baroque, Précieux and Classical periods in the theatre, poetry, novel and other prose genres.

Texts: Corneille, Le Cid, Horace, Rodogune; Mme de Lafayette, La Princesse de Clèves; La Fontaine, Fables; Molière, L'Avare, L'Ecole des femmes, Le Misanthrope; Pascal, Pensées; Racine, Andromaque, Britannicus, Phèdre; Saint-Simon, Mémoires (extraits); Lagarde et Michard, XVIIe siècle (Bordas).

O. Abrioux. (3-0; 3-0)

### FREN 410. (3) Literature of the Eighteenth Century

Principal literary, social and philosophic trends of eighteenth-century France.

Texts: Beaumarchais, Théâtre; Prévost, Histoire du Chevalier des Grieux et de Manon Lescaut; Montesquieu, Lettres Persanes; Rousseau, La Nouvelle Héloise; Diderot, La Religieuse; Laclos, Les Liaisons dangereuses; Marivaux, Théâtre (2 vols.); Voltaire, Oeuvres philosophiques (extraits), Romans et contes; Diderot, Le Neveu de Rameau suivi de six écrits philosophiques, Jacques le Fataliste.

(Not offered 1976-77.)

(3-0; 3-0)

#### FREN 411. (3) Nineteenth Century Part I (Romanticism)

A study of the leading French authors of the first half of the Nineteenth

Texts: Chateaubriand, René; Constant, Adolphe; Stendhal, Le Rouge et le Noir; Hugo, Notre-Dame de Paris; Balzac, Le Perè Goriot. Further texts may be assigned.

(Not offered 1976-77.)

(3-0; 3-0)

#### FREN 412. (3) Nineteenth Century Part II

Realism, naturalism and idealism in the novel and in poetry.

Texts: Baudelaire, Les Fleurs du mal; Flaubert, Madame Bovary, Bouvard et Pécuchet; Barbey d'Aurevilly, Les Diaboliques; Zola, Germinal; Maupassant, Quinze contes; Huysmans, A Rebours; Rimbaud, Poésies; Verne, L'Ile mystérieuse; France, Les Dieux ont soif, and others to be announced.

J. C. E. Greene.

(3-0:3-0)

#### FREN 415. (3) Modern French Theatre

Survey of twentieth-century French Drama. Students will be expected to write two essays per term; in addition, they will prepare material for discussion in class.

Texts: Giraudoux, La Guerre de Troie n'aura pas lieu, Ondine, Electre; Anouilh, Le Voyageur sans bagages, Le Bal des voleurs; Claudel, L'Annonce faite à Marie; Montherlant, La Reine morte, Malatesta; Cocteau, Les Parents terribles, La Machine infernale; Sartre, Huis Clos, Les Mouches, Les Séquestrés d'Altona; Beauvoir, Les Bouches inutiles; Camus, Caligula, Le Malentendu; Artaud, Le Théâtre et son double; Jarry, Ubu Roi; Ionesco, La Cantatrice chauve, Rhinocéros; Beckett, En attendant Godot, Fin de partie; Genet, Les Bonnes; Arrabal, L'Architecte et l'empereur d'Assyrie, Et ils passèrent les menottes aux fleurs; Sarraute, Isma, Silence, Le Mensonge; Audiberti, Le Mal court.

J. R. Waelti-Walters.

(3-0; 3-0)

#### FREN 416. (3) Modern French Novel

The changing face of the novel from Marcel Proust to the nouveau Nouveau Roman.

Texts: Gide, L'Immoraliste: Proust, Du côté de chez Swann; Malraux, La Condition humaine; Sartre, La Nausée; Camus, La Chute; Robbe-Grillet, La Jalousie; Butor, L'Emploi du temps; Le Clézio, Le Procèsverbal; Ricardou, Les Lieux-dits; Gide, Les Faux-Monnayeurs; Beauvoir, Les Belles Images.

(Not offered 1976-77.)

(3-0:3-0)

#### FREN 418. (3) French-Canadian Literature

A survey of French literature in Canada before 1900; a study of French-Canadian literature in the Twentieth Century with emphasis on the novel, theatre and poetry since 1945.

Texts: Bessette, Geslin, Parent, Histoire de la littérature canadiennefrancaise; Sylvestre, Anthologie de la poésie québecoise; Hémon, Maria Chapdelaine; Aubert de Gaspé, Les Anciens Canadiens; Savard, Menaud, maître-draveur; Roy, Bonheur d'occasion; Lemelin, Les Plouffe; Bessette, Le Libraire; Blais, La Belle Bête; Hébert, Les Chambres de bois; Langevin, Poussière sur la ville; Godbout, L'Aquarium; Thériault, Agaguk; Gélinas, Tit-Coq; Claude Jasmin, La Corde au cou; and others to be announced.

Essays and classroom exposés.

G. E. Moreau.

(3-0; 3-0)

#### \*FREN 421. (11/2 or 3) Renaissance Literature

An introduction to the principal literary works of the Renaissance in France and a study of the history of ideas based upon selected texts.

Texts: Rabelais, Gargantua; Montaigne, Essais.

This course will be offered for 1½ units of credit in 1976-77.

E. Limbrick.

September-December only. (3-0)

## \*FREN 422. (11/2 or 3) Medieval Literature

Study of a number of medieval literary works in the original. Students will learn to read medieval French and acquire some knowledge of the principal literary genres of the period.

This course will be offered for 1½ units of credit in 1976-77.

Texts: Larousse, Dictionnaire d'ancien français; Champion, Aucassin et Nicolette, Chantefable du XIIIe siècle.

B. F. Beardsmore.

January-April only. (3-0)

\* As many as possible of the courses marked with an asterisk will be offered in 1976-77. Before registering, students of French should consult the Chairman of the Department.

#### FREN 425. (3) History of the Language

A study of the development of the language from earliest to modern times.

Texts: W. von Wartburg, Evolution et structure de la langue française, (A. Franke, 9th edition, 1969).

B. F. Beardsmore (3-0; 3-0)

#### FREN 426 (Linguistics 426). (3) Comparative Stylistics of French and English

A contrastive study of the semantic and stylistic resources of French and English at the structural and cultural levels.

Prerequisite: French 302.

(Not offered 1976-77.) (3-0; 3-0)

FREN 430. (3) Directed Reading Course

(3-0; 3-0)

FREN 431. (11/2) Directed Reading Course September-December only. (3-0)

FREN 432. (11/2) Directed Reading Course January-April only. (3-0)

#### FREN 490. (3) Honours Tutorial

Fourth Year Honours students only who are graduating in 1977. Students will meet one hour a week with a tutor throughout Fourth Year to do reading and other work beyond that assigned in lecture courses with a view to preparing the final written and oral comprehensive examinations.

Effective 1977-78, this course will have a value of  $1\frac{1}{2}$  units.

Members of the Department.

#### **GRADUATE COURSES**

NOTE: A selection of these courses will be given depending upon the availability of members of faculty. Students should consult the Graduate Advisor before making choices. In addition students should read carefully the entry under Faculty of Graduate Studies, French.

FREN 501. (11/2) French Literary Criticism Since Sainte-Beuve

FREN 506. (1 1/2 or 3) Pascal in his Time

FREN 514. (3) The Theory of Poetry in France from 1850 to 1930

FREN 516. (3) Le Nouveau Roman in France

FREN 517. (3) Marcel Proust: A la recherche du temps perdu

FREN 521. (3) Montaigne's Essais and their Literary and Philosophical Influence

FREN 590. (11/2 or 3) Directed Studies

FREN 599. (6) Thesis

## DEPARTMENT OF GEOGRAPHY

Charles N. Forward, B.A., M.A. (Brit. Col.), Ph.D. (Clark), Professor and Head of the Department.

W. R. Derrick Sewell, B.Sc.Econ. (London), M.A., Ph.D. (Wash.), Professor.

Rudolph W. A. Wikkramatileke, B.A. (Ceylon), M.A. (Clark), Ph.D. (London), Professor. (On study leave 1976-77.)

Robert J. Earickson, B.S., M.A. (Arizona), Ph.D. (Wash.), Visiting Associate Professor (1975-76).

Harold D. Foster, B.Sc., Ph.D. (London), Associate Professor.

Charles H. Howatson, B.A., M.A. (Brit. Col.), Associate Professor.

David Chuen-Yan Lai, B.A., M.A. (Hong Kong), Ph.D. (London), Associate Professor.

J. Douglas Porteous, B.A., M.A. (Oxon.), Ph.D. (Hull), Associate Professor.

Stanton E. Tuller, B.A. (Ore.), M.A., Ph.D. (Calif., Los Angeles), Associate Professor.

Roman A. Cybriwsky, B.S. (Wis.), M.S., Ph.D. (Penn. State), Visiting Assistant Professor (1975-76).

Michael C. R. Edgell, B.A. (Birmingham), Conservation Dip. (London), Ph.D. (Birmingham), Assistant Professor.

Malcolm A. Micklewright, B.A., Ph.D. (Wash.), Assistant Professor.

Peter E. Murphy, B.Sc.Econ., Teachers Dip. (London), M.A., Ph.D. (Ohio St.), Assistant Professor. (On study leave 1976-77.)

William M. Ross, B.Ed. (Brit. Col.), M.A. (Tor.), Ph.D. (Wash.), Assistant Professor.

Colin J. B. Wood, B.A. (Wales), M.A., Ph.D. (McMaster), Assistant Professor.

Kyung Lee, B.A. (Cal. State, Los Angeles), M.A., Ph.D. (Calif, Los Angeles), Sessional Lecturer (1975-76).

Christianna Crook, B.S. (Portland), M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).

Gilian D. McDade, B.A. (Witwatersrand), Senior Laboratory Instructor. Ian H. Norie, Senior Academic Assistant.

#### **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and Ph.D. degrees, see page 149; for graduate courses, see page 67.

#### GENERAL, MAJOR AND HONOURS PROGRAMMES

The Geography Department offers courses leading to the B.A., B.Sc., M.A. and Ph.D. degrees, with a choice of General, Major, and Honours programmes for both bachelor degrees. Information about course combinations suited to specific professional objectives and about graduate programmes is available from the Department. In general, the Department recommends an appropriate first-year mathematics course, especially Computing Science 170 and 171, for the B.A. Major and Honours programmes, and considers a second-year mathematics course, chosen in consultation with the Department, desirable for B.Sc. candidates. Second year Geography Major and Honours students may take the required Geography 321 and one of 322, 323 in their second year, if they so wish. Moderate fees will be charged students in Geography 323, 423, and in certain courses with announced field trips.

An up-to-date list of courses offered and the faculty members assigned to courses will be available in the Departmental Office, Cornett Building, after September 1. Students who wish academic counselling are asked to come to the Department before or during the registration period.

Departmental requirements for the B.A. General and Major in Geography

raphy

General — 15 units: 101; 3 units chosen from 201, 203, 204 and 205; and 9 units of courses numbered 300 or above, 3 units of which selection must be a regional course.

Major — 24 units: 101; 203; 3 units chosen from 201, 204 and 205; 321 and one of 322, 323; and 12 units of courses numbered above 300, 3 units of which selection must be a regional course.

Departmental Requirements for the B.Sc. General and Major in Geography.

General — 15 units: 101; 203; and 9 units of courses chosen from 321, 322, 323, 350, 370, 371, 372, 373, 374, 375, 376, 377, 421, 423, 442, 450, 451, 459 and 479.

Major — 24 units: 101, 203; 3 units chosen from 201, 204 and 205; 321, and one of 322, 323; 12 units of courses chosen from 322, 323, 350, 370, 371, 372, 373, 374, 375, 376, 377, 421, 423, 442, 450, 451, 459 and 479. All major students are required to obtain:

(a) Three units of credit from Mathematics 100 and 101 (or 130), or 180, or three units from 102, 110, and 151, or Computing Science 170 and 171.

(b) Six units of credits chosen from the following list or from appropriate courses numbered 300 or above chosen in consultation with the Department:

Astronomy 120, 200

Bacteriology 200

Biology 150, 200, 203, 204, 206, 207

Chemistry 120, 124, 224, 230, 233

Geology 200

Mathematics 200, 201, 210, 230, 231, 232, 240, 253, Computing Science 272, 273

Physics 101, 103, 121, 211, 212, 213

Departmental Requirements for the B.A. and B.Sc. Honours in Geography — 33 units minimum: 101; 203; 3 units chosen from 201, 204 and 205; 321 and one of 322, 323; 499; and 18 other units in Geography or in other approved courses numbered above 300 chosen in consultation with the Department. At the end of the fourth year, the candidate will take an oral examination and submit an Honours Essay.

Students normally enter the Honours Programme in their third year, having applied at the end of their second year. Requirements for entry into the Honours Programme are: completion of two successful years at university (see "Faculty of Arts and Science — Honours Programme" entry in this calendar) and a grade point average of at least 4.5 in all work for the second year. A student wishing to enter the programme in the fourth year (at the end of the third year) must have a grade point average of at least 5.0 for work completed in the third year.

A grade point average of 5.0 must be achieved by an honours student to progress from third to fourth year in the Honours Programme. Students who do not maintain this average will be required to transfer to a Major

Programme.

First and second class honours degrees may be awarded. A first class degree requires a first class graduating average (6.5 or higher) and at least a B+ in Geog. 499. A second class degree requires a second class graduating average and at least a B- in Geog. 499.

#### **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

#### GEOGRAPHY

Geography 101 is prerequisite to all other geography courses. This prerequisite may be waived by the Department in certain circumstances. In the event that a student who has had Geography 101 waived proceeds to a General, Majors or Honours programme in Geography, he or she will be required to take six units of second year courses in a General and nine units of second year courses in a Major or Honours programme.

### GEOG 101. (3) Introduction to Geography

A systematic description and analysis of the surface of the earth as the home of man. First term lectures will introduce the characteristics and interactions of the atmosphere, hydrosphere, lithosphere, and biosphere, including man, and will survey the historic, global association of man and environment. Second term lectures will examine rural and urban land use, environmental quality, and the dilemma of growth on a finite earth. Laboratory sessions will emphasize discussion of lectures and readings.

M. C. R. Edgell, W. M. Ross, J. D. Porteous, C. J. B. Wood. (2-2; 2-2)

#### GEOG 201. (3) Economic Geography

An analysis of the areal distribution of economic activity, examining the characteristics of different industries, their inter-relationships with each other, and the characteristics of different economic regions. Theories of location and models of regional economic development are discussed and applied. Problems resulting from disparate levels of economic development, and from growth and decline of activities are considered.

#### GEOG 203. (3) Physical Geography

A study of meterology, climatology, geomorphology, pedology, biogeography, hydrology, and their inter-relationships.

C. H. Howatson, S. E. Tuller.

(2-2; 2-2)

## GEOG 204. (3) Geography of Canada

The course deals with the geography of Canada both systematically and regionally. Among the topics treated systematically in the first half are: population and settlement; transportation systems; natural resources; manufacturing and services; urban characteristics and metropolitan dominance; regional planning and economic development. Regional studies of the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, British Columbia and the Yukon and Northwest Territories are emphasized in the second half, with due consideration being given to economic and social problems and development policies. The course concludes with a discussion of regionalism, nationalism and external relations.

C. N. Forward. (2-2; 2-2)

#### GEOG 205. (3) Introduction to Cultural Geography

A comparative and historical approach to the impact of ideas and social institutions upon landscape and the evolution of geographic areas. Cultural variations in man's perceived role in his environment and the attendant ethnocentric difficulties in adapting modern resource development to areas of traditional culture. (2-2; 2-2)

#### DEPARTMENT OF GEOGRAPHY — UNDERGRADUATE COURSE STRUCTURE

Second Year	101 (3) Introduction to Geography			
First Year	203 (3) Physical; 201 (3) Economic; 204 (3) Canada; 205 (3) Cultural			
Third and Fourth Years	*			
Techniques and Methods	Urban, Economic and Cultural	Resources and Physical	Regional	
<ul> <li>321 (1½) Introduction to Quantitative Methods in Geography</li> <li>322 (1½) Air Photo Interpretation</li> <li>323 (1½) Cartography</li> </ul>	340 (3) Introduction to Urban 341 (1½) Industrial 342 (1½) Transportation & Commodity Flows 343 (1½) Regional Analysis 344 (1½) Urban Systems Simulation 346 (1½) Community Development and Planning in Canada. 347 (3) Economic & Cultural Change	350 (3) Introduction to Resources 370 (1½) Hydrology 371 (1½) Water Resources Management 372 (1½) Climatology 373 (1½) Applied Climatology  374 (1½) Biogeography 375 (1½) Biospheric Resources	360 (3) Introduction W. Pacific Rim 368 (3) W. Canada 369 (3) Europe	
401 (0) 41 1 0 1 1	348 (3) Historical	376 (1½) Geomorphology 377 (1½) Applied Geomorphology		
421 (3) Advanced Quantitative Methods 423 (1½) Advanced Cartography 429 (3) History & Nature of Geog. 490 (1-3) Directed Studies 499 (3) Honours Seminar & Essay	<ul> <li>440 (1½) Seminar on Urban Geography of Canada</li> <li>443 (1½) Geography of Regional Development</li> <li>444 (1½) Urban Transportation and Land Use Planning</li> <li>446 (1½) Development &amp; Planning of the Urban Region</li> <li>447 (1½) Urbanization in Developing Countries</li> </ul>	<ul> <li>450 (3) Decision-Making in Resources Management</li> <li>451 (3) Water Resources Planning and Policy-Making</li> <li>458 (3) Seminar on Territory, Resources and Conflict.</li> <li>459 (3) Recreational Resource Analysis</li> <li>479 (3) Seminar in Physical Geography</li> </ul>	462 (3) Soviet Union 463 (3) S. E. Asia 464 (3) China 465 (3) Japan 466 (3) Australia 467 (3) South Pacific 469 (3) Latin America	
	448 (3) Urban Social Geography 449 (1½) Urban Historical Geog- raphy			

#### TECHNIQUES AND METHODS

# GEOG 321 (formerly 300). (1 ½) Introduction to Quantitative Methods in Geography

An introduction to statistical reasoning and methodology which may be applied to the analysis of geographic problems. The course will emphasize the structuring of a research design and will provide the student with the opportunity to use statistical techniques in the empirical analysis of assigned class topics. (Not open to students with credit for Geography 300).

C. J. B. Wood.

September-December only. (2-2)

#### GEOG 322 (formerly 300). (1 1/2) Air Photo Interpretation

An introduction to photogrammetry and interpretation of aerial photographs and infrared imagery. Attention is focussed on the training in the use of air photos as source materials in map compilation and as tools for research in physical and social sciences. Among the topics studied are: principles and techniques of photo-interpretation; inductive and deductive evaluation of air photo patterns; principles and operation of the multiplex stereoscopic mapping machine; and remote sensing techniques. Laboratory assignments and field work will be emphasized. (Not open to students with credit for Geography 300).

C. H. Howatson.

January-April only. (2-2)

## GEOG 323 (formerly 300). (1 1/2) Cartography

An introductory course in cartography and cartographic techniques including: the properties of map projections, techniques of terrain representation, the cartographic representation of statistics and map reproduction methods. Emphasis will be placed on the application of learned techniques to map production. (Not open to students with credit for Geoggraphy 300).

September-December only. (2-2)

## GEOG 421 (formerly 402) (3) Advanced Quantitative Methods in Geography

The course will introduce more advanced statistical techniques which are applicable to geographic research. Emphasis will be placed upon the problems of application and interpretation, with the students being given the opportunity to apply techniques to empirical research.

Prerequisite: Geography 321 or 300 or permission.

(2-2; 2-2)

#### GEOG 423 (formerly 401). (11/2) Advanced Cartography

This course is intended to add to the cartographic skills and knowledge taught in Geography 323. The course includes advanced techniques, such as scribing photo-mechanical work, the mathematical analysis of map projections, and advanced work in aerial photography. Field trips may include visits to governmental mapping agencies.

Prerequisite: Geography 323 or 300.

January-April only. (2-2)

## GEOG 429 (formerly 445). (3) The History and Nature of Geography

Geography from ancient times to the present; the most important geographers and an assessment of their contributions; significant contemporary geographic concepts and developments.

(Not offered 1976-77.)

(0-0-3; 0-0-3)

#### GEOG 490. (1-3) Directed Studies in Geography

In special cases, with the consent of the department and the individual instructor concerned, a student may be permitted to pursue a course of directed studies.

### GEOG 499. (3) Honours Seminar and Essay

Third and fourth year students attend the seminar during their first term in the honours programme, but do not register in the course until fourth year. The seminar meets every two weeks, providing an orientation to the demands of the honours programme, and helping the student to develop critical scholarly attitudes towards reading and the formulation, design and discussion of research work. For the remainder of the honours programme, the seminar is replaced by informal individual meetings with the honours student advisor and the essay supervisor. The essay, submitted at the end of the fourth year, will be based upon first hand research or field work, and must demonstrate the student's ability to produce work of high scholarly merit under the supervision of a faculty member. It will be a standard higher than that demanded for a term essay, but definitely not as high as the standard demanded for a Master's thesis.

M. C. R. Edgell.

#### URBAN, ECONOMIC AND CULTURAL

#### GEOG 340 (formerly 305). (3) Introduction to Urban Geography

As an introuction to the field of urban geography the course is very broad in scope. Among the topics studied are: the rise and growth of cities; location, size and spacing; economic base; population characteristics; urban transportation; residential, commercial and industrial structure of cities; the urban fringe; the metabolism of the city; urban renewal; and the planning of the urban environment. (3-0; 3-0)

#### GEOG 341. (11/2) Industrial Geography

An analytical examination of factors affecting location of manufacturing industries and the growth of manufacturing regions. Topics of discussion will include theories and models of industrial location; communist ideas of industrial location; measurement of industrial location and association; and consideration of industrial policies and planning in selected countries.

(Not open to students who have taken Geography 310.)

D. C.-Y. Lai.

September-December only. (3-0)

#### GEOG 342. (1 1/2) Transportation and Commodity Flows

Interregional and intercity modes of transportation are studied in terms of their function as dynamic features of the economic and cultural landscape. Railway, highway, pipeline, water, and air transport modes are considered as integrated systems that handle the movement of commodities and passengers within national and continental areas. Specific examples of commodity flows are studied in relation to economic development and the nodal function of cities. The locational attributes and functions of seaports, airports and land transportation terminals as interchange points in transport networks are fully explored. The effect of possible transport innovations also is investigated.

(May be offered 1976-77.)

January-April only. (3-0)

#### GEOG 343. (1 1/2) Regional Analysis

An examination of socio-economic systems from a spatial viewpoint. Major themes are spatial structures, shifts in location of activities, circulation systems, city-region relations, and regional economic development. A variety of conceptual models will be applied to the above topics. Assignments will involve outside readings and two or three short term projects.

Prerequisite: Geography 201, 204 or 205 or permission.

(Not open to students who have taken Geography 442 in 1969-70.)

M. A. Micklewright.

January-April only. (3-0)

#### GEOG 344. (11/2) Urban Systems Simulation

Gaming procedures which simulate real-world urban processes form the core of this course. By adopting the roles of developers, politicians, planners, public-interest groups or other decision-makers, participants gain an understanding of the complex inter-relationships and interactions occurring within an urban system. The following topics are stressed: urban transportation; land-use development; zoning; urban-rural relationships; pollution; poverty; politics and municipal finance. Participants will be given the opportunity to redesign the gaming procedures and also to relate specific gaming situations to contemporary planning problems in Canadian cities.

Prerequisite: Geography 340 (formerly 305) or permission.

Enrolment limited to 20: preference given to students in related urban courses.

J. D. Porteous.

January-April only. (0-0-3)

#### GEOG 346. (11/2) Community Development and Planning in Canada

The course is concerned with the development of communities in the Canadian urban system. It examines the planning problems and administration issues that have evolved in Canada's wide range of communities and cultures. The focus is on the manner in which spatial and technological developments have influenced the social and environmental balance of present communities.

September-December only. (3-0)

#### GEOG 347 (formerly 311). (3) Geography of Economic and Cultural Change

A review of the variable factors affecting lesser developed parts of the world, and of technological, economic and cultural changes which result from the interaction of these factors. The initial part of the course will be devoted to a systematic treatment of factors affecting change. The second part of the course will consist of a number of geographical studies of areas at different stages of development. Students without the usual prerequisite who are particularly interested in the course should discuss the matter with the instructor. (3-0; 3-0)

#### GEOG 348 (formerly 307). (3) Historical Geography

An introduction to the field of historical geography, specifically, the methods of interpreting landscape changes. Attention is focused on the major theories of the subject as identified in the historical geography literature. This includes the reconstruction of geographical settings for periods of particular historical significance. Local studies grounded on field and archival investigations may be undertaken. Geography 205 is recom-

(Not offered 1976-77.) (3-0;3-0)

#### GEOG 440. (11/2) Seminar on Urban Geography of Canada

Canadian cities are studied both as a group and individually. At the group level the processes of urbanization, urban growth and economic development as well as the characteristics of size, spacing and central place relationships are investigated. Individual cities are treated as urban laboratories in which theoretical aspects of urban studies can be applied. Census data will be relied upon as major sources of information available on a uniform basis. This will facilitate comparative studies of cities. An important goal of the course is to explore fully the elements of urban structure and dynamic functions of a city.

Prerequisite: Geography 340 (formerly 305) or permission.

C. N. Forward. September-December only. (0-0-3)

#### GEOG 443. (11/2) Geography of Regional Development

The course is designed to provide for the application of the techniques learned in Geography 343 (Regional Analysis), and to extend the students' awareness of the crucial role that geographic factors such as the physical environment, resource location, population distribution, and transportation networks, play in regional deveolpment. The course will evaluate the changing spatial relationships between the location of resources and population. Problems in establishing criteria for the delimitation of meaningful regional boundaries will be investigated. This will involve discussion of the 1) geographical limits of various political jurisdictions in federal states as opposed to unitary states and the powers vested in the various levels of government to implement development plans and 2) problems of data availability on regional and subregional basis. Social and institutional obstacles to change will be discussed.

Regional policies in Canada and the countries of Western Europe will be discussed and evaluated with particular reference to their strategies for the development of slow growth or stagnant areas within their national boundaries, and the differing emphases placed on the role of growth poles, transportation, technological innovation, population, migration and industrial incentives in their national planning procedures.

Prerequisites: Economics 200 and Geography 343 or permission.

(May be offered 1976-77.) January-April only. (3-0)

#### GEOG 444. (11/2) Urban Transportation and Land Use Planning

The problem of developing a satisfactory transportation system relative to the areal pattern of land use in an urban area is the major concern of this course. The functions of the various modes of transport and their effectiveness in the urban environment are investigated. Land use types are studied as generators of traffic in the city. An attempt is made to determine the volume and nature of traffic generated by different land uses. Consideration is given to the possibilities of drastically altering land use patterns of cities, as well as changing transport systems.

Prerequisite: Geography 340 (formerly 305) or permission.

(Not offered 1976-77.) January-April only. (3-0)

#### GEOG 446. (11/2) Development and Planning of the Urban Region

The course examines the linkages that exist between current urban geography analysis and the planning problems of the metropolitan regions of the North American continent. The course attempts to demonstrate the contribution geography may make, as a social science, to the overall planning and development of such city regions. The aspects of the urban environment selected for study include topics, such as, migration and housing patterns, industrial and transportation considerations, and the influence of central government pressure and legislation.

Prerequisite: Geography 340 (formerly 305) or permission.

September-December only. (3-0)

## GEOG 447. (1 1/2) Urbanization in Developing Countries

The purpose of the course is to examine the fundamental differences between urban organization in the developed and developing world; to study the historic, cultural and socio-economic conditions under which cities in the developing world are growing; and to test the applicability of theories which were founded on studies of western cities.

Prerequisite: Geography 340 (formerly 305) or permission.

D. C.-Y. Lai. January-April only. (3-0)

#### GEOG 448. (3) Urban Social Geography

A behavioural approach to the study of man-environment systems in an urban context. With a base in cultural geography and environmental psychology, the course will investigate the spatial dynamics of urban behaviour in western societies, with special reference to neighbourhood interaction, community development, and perceptions, attitudes and learning within the urban system. Students should become aware of the contemporary urban social problems which are involved in planning the metropolitan environment.

Prerequisite: Geography 340 (formerly 305) or permission.

J. D. Porteous. (3-0;3-0)

#### GEOG 449. (11/2) Urban Historical Geography

The rise and growth of cities is the main theme of the course. Site characteristics and the design and development of the built environment constitute one aspect, but emphasis is placed on the evolution of the economic and social structure. The effects on city form and function of technological change in transportation, construction, manufacturing and distribution are studied. Changing attitudes to land use, building scale and density, and urban morphology are explored. An attempt is made to assess the impact of the urban planning process.

Prerequisite: Geography 340 (formerly 305) or permission.

C. N. Forward. September-December only. (3-0)

#### RESOURCES AND PHYSICAL

## GEOG 350. (3) Introduction to Resource Geography

An introduction to the geographic study of natural resources: their form, inherent characteristics, and external relations with the geography of the areas in which they are found. These resources may include land, water, the atmosphere, fisheries, wildlife and forests. Attention will be paid to the way in which resources and their use contribute to the character of areas and the manner in which interrelated aspects of culture—technology, perception, economic and institutional elements—help determine the pattern of use and its areal variations. Contemporary problems and issues of resource management in North America, such as rapidly growing population, increasing urbanization and demands for improved environmental conditions, will be emphasized.

W. M. Ross. (3-0;3-0)

## GEOG 370 (formerly 320). (1 1/2) Hydrology

A study of hydrology, focusing on the various factors that influence the distribution of water resources in time and space. Among the topics studied are; evaporation and transpiration; runoff and stream gauging; snow and ice surveying; flood prediction and droughts. A term project, generally involving field work, is required. This course provides the background in physical hydrology recommended for students registering for Geography 371.

Prerequisite: Geography 203 or permission.

W. R. D. Sewell. September-December only. (2-2)

## GEOG 371 (formerly 353). (11/2) Water Resources Management

A study of water resources management in different parts of the world examining the influence of various physical, economic, social, political, and technological factors. The alternative ways in which such problems of water scarcity, floods, and declining water quality are handled will be discussed. A number of major water development schemes will be examined in detail. Students will be expected to undertake a modest research project and report upon it. (Not open to students with credit for Geography 320 before 1970-71 or Geography 353.)

Prerequisite: Geography 370 (formerly 320) or permission.

H. D. Foster. January-April only. (2-2)

#### GEOG 372 (formerly 302). (1 1/2) Climatology

An investigation of the physical processes that determine the variation in climate and weather from place to place around the world. Emphasis will be on the processes of mutual interaction between the earth's surface and the atmosphere, and the role of differing surface types in creating the climate above them. Laboratory work will focus on a local, applied microclimatologic problem.

Prerequisite: Geography 203 or permission.

S. E. Tuller. September-December only. (2-2)

### GEOG 373 (formerly 351). (1 1/2) Applied Climatology

A study of the application of physical principles to practical problems in microclimatology and the reciprocal interaction between climate and man's activities. Discussion topics will include; effects of different surface types

on the microclimate, bioclimatology and agricultural climatology, climatic change, urban climatology and man's intentional and unintentional modification of the climate on both large and small scales. (Not open to students who have taken Geography 302 before 1970-71 or Geography 351.)

Prerequisite: Geography 372 (formerly 302).

S. E. Tuller. January-April only. (2-2)

#### GEOG 374 (formerly 306). (1 1/2) Biogeography

This course provides an analysis of the organization of biotic systems. Origins, dispersals, evolution, and limiting physical, biotic and cultural factors as they relate to present day distribution patterns and ecological relationships will be considered. Particular attention will be paid to: the nature of ecological relationships; the landscape patterns resulting from these relationships; the dynamic character of ecosystems; the impact of man upon ecological processes and ecosystem character.

Prerequisite: Geography 203 or permission.

M. C. R. Edgell. September-December only. (2-2)

#### GEOG 375 (formerly 352). (11/2) Biospheric Resources

The nature and results of man's interactions with the natural environment are the main foci of this course. An introductory section will outline the major influences upon the development of present day western attitudes towards the environment. This section will be followed by a selective examination of the interplay between culture, social, economic and ecologic processes in biological resource utilization. Particular emphasis will be placed upon the ecological parameters of resource systems, and the relationship of these parameters to actual and potential resource use. (Not open to students who have taken Geography 306 before 1970-71 or Geography 352.)

Prerequisite: Geography 374 (formerly 306) or permission.

M. C. R. Edgell. January-April only. (2-2)

#### GEOG 376 (formerly 312). (11/2) Geomorphology

An investigation of the genesis and distribution of landforms. Emphasis will be placed upon techniques used in the measurement of those processes which are of prime importance in the evolution of glacial, periglacial, temperate and tropical landforms. Marine, karstic and volcanic landforms will also be studied. The course will involve outside readings, field trips, and participation in a group research project. (Not open to students with credit for Geography 312 or 412).

Prerequisite: Geography 203 or Geology 200 or permission.

H. D. Foster. September-December only. (2-2)

## GEOG 377 (formerly 354). (1 1/2) Applied Geomorphology

A detailed examination of the social relevance of geomorphology, in which three areas receive emphasis. Terrain analysis involves the evaluation of landscapes for mineral resources, trafficability, urban and industrial site suitability and agricultural productivity potential. Terrain stability studies explore the problems involved in maintaining landscape equilibrium in the face of major engineering schemes and waste disposal. Special attention is also paid to risk from natural hazards, especially those of importance in western North America, such as earthquakes, tsunamis, avalanches and volcanic eruptions.

Outside readings, field trips and participation in a group research pro-

ject are involved.

Prerequisite: Geography 376 (formerly 312) or permission.

H. D. Foster. January-April only. (2-2)

#### GEOG 450. (3) Decision-Making in Resources Management

An advanced course in the geography of resources management and conservation. Its purposes are to determine the factors which appear to influence decision-making in the resources field, and to examine the effects of different decisions upon the physical and human environments. The first part of the course is devoted to a review of various approaches to the analysis of resource management decisions. The second part of the course deals with a number of case studies from different parts of the world, applying methodologies developed in the first part of the course, and comparing the impacts on the human and physical landscapes.

Prerequisite: Geography 350 or permission.

W. R. D. Sewell. (3-0; 3-0)

#### GEOG 451. (3) Water Resources Planning and Policy-Making

Models of water resources planning and policy-making will be described and applied to specific cases. An attempt will be made to isolate factors which appear to account for individual approaches to planning and particular policy outcomes. Specific attention will be paid to the kinds of information needed for effective planning and policy-making. Topics will be drawn mainly from Canada, and will include problems associated with urban water supply, irrigation, floods, water-based recreation, large scale water diversion, and the relationship between water development and economic and social change. Students will be expected to undertake a research project and to attend a field trip.

Prerequisites: Geography 350, 370 (formerly 320) and 371 (formerly 353) or permission.

(Not offered 1976-77.) (3-0; 3-0)

#### GEOG 458 (formerly 442). (3) Seminar on Territory, Resources and Conflict

This course is concerned with the description and analysis of the geographical characteristics of conflict over natural resources allocation. Topics are examined at macro, meso and micro geographial scales and are drawn from different parts of the world. They include: common property resources (the oceans), the geography of development and aid, extraterritoriality, northern latitude development, and integrated land management at the regional scale.

Prerequisite: Geography 350 or permission.

C. J. B. Wood. (0-0-3; 0-0-3)

#### GEOG 459. (3) Recreational Resource Analysis

A study of recreational resources, which range from national parks to city parks and from public beaches to summer cottaging territory, the course will analyse the methods which have been used to estimate land use capability, to identify spatial patterns of circulation and demand, and to measure environmental perceptions as they relate to recreational activity. Emphasis will be placed on questions such as — is it possible to predict future demand for recreational space; is the existing administrative framework flexible enough to respond to changing patterns of recreational resource demand; is wilderness development possible without damaging natural quality.

Prerequisite: Geography 350 or permission. (3-0; 3-0)

#### GEOG 479 (formerly 441). (3) Seminar in Physical Geography

A course for students who desire advanced work and practical research experience in the fields of climatology, biogeography, geomorphology or hydrology. Emphasis is on learning through actual experience. Students will be expected to initiate and complete suitable research projects in one or a combination of the above fields in close consultation with the appropriate faculty member or members. Students planning to take this course in their fourth year should consult with the Department in their third year. (Not open to students with credit for Geog 441.)

Prerequisites: Geography 203 and 370 and 371, or 372 and 373, or 347 and 375, or 376 and 377.

H. D. Foster, M. C. R. Edgell, S. E. Tuller. (0-0-3; 0-0-3)

#### REGIONAL

Pacific Studies 300, Themes and Problems of the Pacific is recommended for students intending to take regional courses on the Pacific area (462, 463, 464, 465, 466 and 467).

#### GEOG 360. (3) Introduction to the Geography of the Western Pacific Rim

The western Pacific Rim is an area which includes the Soviet Far East, China, Japan, Southeast Asia, Australia, New Zealand and Islands of the Pacific. The course will bring to students concrete applications of fundamental geographic concepts and the realities of living patterns in particular areal settings. Attention will be focussed on geographical aspects of historical development, cultural interaction, divergent attitudes to resources, and the relationships between disproportionately large populations and the habitats which support them. The course will also serve as an introduction for more advanced courses concerned with specific parts of the study area.

D. C.-Y. Lai. (3-0; 3-0)

### GEOG 368 (formerly 410). (3) Geography of Western Canada

A study of the resources and regional development in the four western provinces with emphasis on the more developed parts. Particular attention will be given to problems in the forest industry of British Columbia; the use of water for power and irrigation in Western Canada; the competition for use of land by forestry, grazing and cultivation; and diversification of agriculture on the Prairies. Comparisons will be made between British Columbia and the Prairie provinces with respect to: the historical development of settlement; the variety and availability of mineral resources; manufacturing and urban development.

C. H. Howatson. (3-0; 3-0)

#### GEOG 369 (formerly 408). (3) Geography of Europe

A systematic study of the economic, social and political patterns and processes which characterize Europe. Particular emphasis will be given to the themes of urbanization, industrialization and regional differentiation. Throughout, Europe will be considered as a living laboratory for testing contemporary geographic concepts.

#### GEOG 462. (3) Geography of the Soviet Union

An analysis of patterns, process, priorities and problems in Soviet socio-economic development. Topics include: Soviet geopolitics; environmental management; regional organization and diversity; industrial, agricultural and trading policies; family and living patterns; and the urban milieu. Basic strategies will be identified and evaluated as models for developing countries seeking rapid growth.

(3-0:3-0)

(3-0;3-0)

#### GEOG 463 (formerly 308). (3) The Geography of Southeast Asia

A geographic survey of the regions and resources, both physical and human, of the countries of Southeast Asia together with a discussion of the problems associated with underdevelopment and the geographic implications of political differences in the area.

(3-0;3-0)

#### GEOG 464. (3) Geography of China

A detailed analysis of the physical and cultural landscapes of China, followed by an intensive study of certain regions. Emphasis will be placed on geographic aspects of contemporary socio-economic and political conditions in Mainland China within the framework of the East Asian Communist bloc. The course will also discuss the technique of research and study methods of less advanced countries where statistical information is lacking, incomplete, inaccurate or unavailable.

#### GEOG 465. (3) Geography of Japan

An intensive survey of the physical and cultural patterns, resources, land use, agriculture, industry and economic development of Japan. Special consideration will be given to the geographic aspects of population pressure, resource management and conservation, historical phases of industrialization, and the major geographic regions of Japan.

(3-0; 3-0)

## GEOG 466. (3) Geography of Australia

A systematic and regional study of the geography of Australia. The country will be viewed in the overall framework of the Pacific Basin. As well as an analysis of the fundamental character of the area, attention will be paid to the geographic implications of problems, such as natural resource development, transportation, isolation, limited consumer markets and attempts to foster manufacturing industry.

(3-0;3-0)

#### GEOG 467. (3) Geography of The South Pacific

The geographic study of New Zealand and the major groups of the Oceanic Pacific area (Polynesia, Melanesia and Micronesia). The area will be viewed in context within the overall framework of the Pacific Basin. As well as an analysis of the fundamental character of the area, attention will be paid to the geographic implications of problems, such as alien cultural contact, restricted markets, limited resources, isolation and political and economic development.

(3-0; 3-0)

#### GEOG 469. (3) Geography of Latin America

An intensive study of the physical, economic, social and political patterns and problems of Latin America. With emphasis on the Andean nations, the continent will be considered as an area in which to test concepts relating to: landscape integrity; colonialism; underdevelopment and economic dependence; monocultures; frontier development; and uncontrolled urbanization. Within the context of the Pacific, relationships with Japan, the United States, and Canada will be emphasized.

#### **GEOLOGY**

#### GEOL 200. (3) General Geology

Physical and historical geology. Origin and structure of the earth, materials of the earth, diastrophism, erosion, landforms, mineral deposits, history of the earth and the development of life.

C. H. Howatson. (2-2; 2-2)

Students should note the availability of Liberal Arts 305 (page 76) and Pacific Studies 300 (page 85) as electives in their senior years.

## **GRADUATE COURSES**

Students should consult the Department concerning the courses offered in any particular year. All graduate students are required to take Geography 500, 525 and either 599 or 699.

- GEOG 500. (0) Colloquium in Geography
- GEOG 501. (3) Graduate Seminar in Physical Geography
- GEOG 502. (3) Graduate Seminar in Human Geography
- GEOG 503. (3) Graduate Seminar in Regional Geography
- GEOG 504. (3) Graduate Seminar in the History and Nature of Geography
- GEOG 521. (2) Quantitative Methods in Geography I
- GEOG 524. (2) Quantitative Methods in Geography II

#### GEOG 525. (0) Field Research

All graduate students are required to attend at least one department field trip.

- GEOG 541. (2) Seminar in Urban Analysis
- GEOG 542. (2) Seminar in Urban Problems
- GEOG 551. (2) Seminar in Resources Analysis
- GEOG 552. (2) Seminar in Resources Management Problems
- GEOG 561. (3) Graduate Seminar in Research Problems in the Geography of **British Columbia**

#### GEOG 590 (A-Z). (2) Directed Studies in Geography

Individual titles will be assigned to each lettered section of the course arranged by supervisory committees.

- GEOG 599. (credit to be determined, normally 12 units) M.A. Thesis
- GEOG 699. (credit to be determined, normally 18 units) Ph.D. Dissertation

## DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURE

Michael L. Hadley, C.D., B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Queen's), Associate Professor and Chairman of the Department.

Rosemary Balfour, B.A. (Reading), Ph.D. (Brit. Col.), Associate Professor. Walter E. Riedel, B.Ed., M.A. (Alta.), Ph.D. (McGill), Associate Professor.

Rodney T. K. Symington, B.A. (Leeds), Ph.D. (McGill), Associate Professor. Nora E. Haimberger, B.A., M.A., Ph.D. (Wash.), Assistant Professor.

Peter G. Liddell, M.A. (Edin.), Lecturer.

Elke Kluge, B.A. (Boston), M.A. (Mich.), Part-time Sessional Lecturer (1975-76).

## **GENERAL, MAJOR AND HONOURS PROGRAMMES**

The Department provides three emphases in Germanic Studies which may be elected either independently or in concert:

- 1) German Language
- 2) German Literature and Cultural History
- 3) German Cultural Studies in English Translation

Students specializing in particular programmes will find ample scope for complementing their German Studies in such recommended areas as English and Linguistics.

All students planning to take a concentration in a General Programme or Major or Honours in the Department of Germanic Languages and Literature must take one of English 200, 201, 204, 205.

Students wishing to take Third or Fourth Year courses to meet requirements for a B.A. degree on the general, major or honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. The course numbered 300 should be taken normally in the Third Year. Students wishing to enrol in the Honours Programme will first obtain the approval of the Chairman of the Depart-

An Honours programme in the Department of Germanic Languages and Literature normally requires a total of 63 units over a four-year period, including graduating essay (see German 490). First and Second Class Honours degrees may be awarded. A First Class degree requires a First Class graduating average and at least a B+ in German 490. A Second Class degree requires a Second Class graduating average and at least C+ in German 490.

A student who fails to meet departmental requirements for First Class standing in the Honours programme but has a First Class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet departmental requirements for Second Class standing but has a Second Class graduating average will be offered a Second Class Major Degree.

#### **PROGRAMMES IN GERMAN**

General — German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); nine units of German courses chosen from 300 and those numbered 400 or above.

Major - German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); German 300, 410, plus at least nine units of other courses numbered 400 or above.

Honours — German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); German 300, 410 plus at least fifteen units of other courses numbered 400 or above.

#### **COURSES**

Students with secondary school credit for courses in German will be placed by the department at a level appropriate to their knowledge.

Students with transfer credit from other post-secondary institutions, or those who are fluent in German, will be placed at an appropriate level.

#### **ELEMENTARY COURSES**

## GER 100. (3) Beginners' German

This course is designed for students who have no previous knowledge of German and who wish to acquire a command of the spoken and written language, in preparation for more advanced work. The language laboratory will reinforce the learning of basic speech patterns and idioms, and will complement the active use of German in the classroom.

Texts: To be announced.

N. E. Haimberger, R. T. K. Symington. (3-1;3-1)

N.B. Credit cannot be granted for both German 100 and German 140.

#### GER 140. (3) Elementary German

Survey of grammar; readings in German literature; practice in spoken and written German; films on German-speaking countries. (For students who have completed one or two years of German in secondary school, and for students whose standing in Beginners' German is unsatisfactory for admission to a higher course).

Texts: To be announced.

Members of the Department. (3-1;3-1)

#### INTERMEDIATE AND ADVANCED COURSES

## GER 200 (formerly 290). (3) Intermediate German

Using such diversified approaches as conversation groups, reading and analysis of modern prose, and basic exercises in simultaneous interpretation, this course aims at improving the student's practical mastery of the spoken and written language. The course commences at the level attained in German 100. (Not open to students who have credit for German 290.)

Prerequisite: German 100 or 140 or equivalent.

Texts: L. J. Russon, Complete German Course; Ryder/McCormick, Lebendige Literatur.

M. L. Hadley, N. E. Haimberger.

(3-1;3-1)

## GER 204. (3) Survey of German Culture and Introduction to German Literature

A general survey of the German cultural heritage through readings, films, music and a study of literary selections from the Middle Ages to the present. Not open to students who have credit for German 240, 260, 201 or

Text: To be announced.

Prerequisite: German 100 or 140 or equivalent: German 200 is normally prerequisite to, or corequisite with, this course.

W. E. Riedel.

(3-1:3-1)

#### GER 295. (3) German Literature and Music

A study of the close relationship between German literature and music. The course will illustrate the twin themes of literature in music and music in literature. Texts which have musical settings and compositions which appear in literary works will be discussed. This course is designed to provide a general cultural background for students interested in more than one field. A knowledge of German, or musical training is not required, although General, Major, or Honours students of German should do the reading in the original German.

Prerequisite: Open to any of the following groups of students:

- (a) Any student who has been exempted from, or who has successfully completed first year English or equivalent.
- (b) Any student enrolled in the Department of Music, Faculty of Fine Arts.
- (c) General, Major or Honours students of German by permission of the Department, as an elective.

N. E. Haimberger.

(3-0; 3-0)

## GER 300 (formerly 302). (3) Advanced Composition, Stylistics, and Translation (1)

The aims of this course are to develop the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, translation, style analysis, and to introduce him to simultaneous interpretation in the Language Laboratory.

Prerequisite: German 200 or equivalent.

Texts: Steinhauer, Stilvolles Deutsch; L. J. Russon, Complete German Course.

R. T. K. Symington.

(3-1; 3-1)

## GER 310. (3) German Literature in English Translation

A study of major authors from the 18th Century to the present day.

Prerequisite: First year English or equivalent. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Open to Major and Honours students in German by permission, as an elective only.

Texts: Goethe, Great Writings of Goethe; Spender (ed.), Great German Short Stories; Büchner, Danton's Death; Woyzeck; Hauptmann, The Weavers; Mann, Tonio Kröger; Kafka, The Metamorphosis; Hesse, Steppenwolf; Brecht, The Life of Galileo; Dürrenmatt, The Visit; Weiss, Marat/Sade; Grass, Cat and Mouse; and others.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

## GER 320. (3) German Novel in Translation

A study of selected major works, emphasizing the principal authors and trends in the development of the genre. The novel will be approached both as an art form and a social document, and will be examined within a broad cultural context.

Prerequisite: English 110 or 120. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Open to Major and Honours students in German by permission, as an elective only. Texts: Goethe, Elective Affinities; Fontane, Effi Briest; Ludwig, Between Heaven and Earth; Franz Kaska, The Trial; Thomas Mann, The Magic Mountain, Confessions of Felix Krull, Confidence Man; Herman Hesse, Steppenwolf, Siddhartha; Günter Grass, The Tin Drum.

R. T. K. Symington.

#### GER 390 (formerly 190). (3) German Reading Course

Rapid survey of grammar, reading of general and scientific articles, designed to meet the needs of students who have no knowledge of German, but want to gain reading comprehension in a special field. Limited normally to students in 3rd or 4th year or in graduate studies. (Credit cannot be granted both for German 100 [or 140] and 390).

Texts: Ryder/McCormick, Lebendige Literatur; van de Luyster, German Readings in Science; additional reading material on astronomy, chemistry, ecology, history, linguistics, anthropology, philosophy, physics, psychology, sociology, or other area readings as required will be provided by the Department.

#### GER 400. (3) Advanced Composition, Stylistics and Translation (II)

The aim of this course is to advance the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, advanced translation, style analysis, and by continuing work in simultaneous interpretation in the Language Laboratory.

Prerequisite: German 300 (formerly 302).

Text: To be announced.

W. E. Riedel. (3-1;3-1)

#### GER 401. (3) Modern German Literature (1880-1945)

Representative literary texts will be discussed with reference to social and intellectual background; comparisons with works in Literatures other than German will be made; manifestations of Naturalism, Expressionism and Symbolism in art-forms other than literature will also be studied.

Texts: Hauptmann, Vor Sonnenaufgang, Die Weber; Wedekind, Frühlings Erwachen; Kaiser, Von morgens bis mitternachts, Die Bürger von Calais; Kafka, Die Verwandlung; Schnitzler, Liebelei; Hofmannsthal, Tor und Tod, Jedermann; Thomas Mann, Tonio Kröger, Tod in Venedig; Hesse, Der Steppenwolf; Brecht, Die Dreigroschenoper; Zuckmayer, Der Hauptmann von Köpenick; Bergengruen, Die Feuerprobe.

## GER 402. (3) Contemporary German Literature (1945 to the present)

The course will investigate some of the significant and representative works of German literature since 1945. These works will be considered in the light of political, social, and intellectual developments in Post-War Germany.

Texts: Brecht, Der gute Mensch von Sezuan; Borchert, Draussen vor der Tür; Hochwälder, Das heilige Experiment; Hochhuth, Der Stellvertreter; Dürrenmatt, Die Physiker; Frisch, Andorra; Grass, Davos; Dorst, Toller; Weiss, Marat/Sade; Plenzdorf, Die neuen Leiden des jungen Werther; and others to be announced.

(Not offered 1976-77; intend to offer 1977-78.) (3-0; 3-0)

#### GER 404. (3) The Romantic Movement

A study of prose and poetry of the period. Attention will also be given to the historical, social, artistic, religious and philosophical background.

Texts: Stenzel, Die deutschen Romantiker (Vols. I and II). Additional works will be announced.

(Not offered 1976-77.) (3-0; 3-0)

#### GER 408. (3) German Poetry from 1830 to the Present

Studies in Realism, Naturalism, Impressionism, Expressionism, and contemporary trends in German poetry.

Texts: Mörike, Poems (Blackwell's, Oxford); Heine, Buch der Lieder (Goldmanns Taschenbücher); C. F. Meyer, Gedichte (Goldmanns Taschenbücher); R. M. Rilke, *Poems* (Clarendon, Oxford); Heym, *Gedichte* (Fischer Bücherei); Benn, *Selected Poems* (Oxford); Nelly Sachs, *Ausgewählte* Gedichte (Suhrkamp); other selections may be announced.

## GER 410. (3) The Classical Period

Liferature of the eighteenth and early nineteenth century with emphasis on the works of Lessing, Schiller and Goethe.

Texts: Lessing, Nathan der Weise; Schiller, Gedichte; Schiller, Die Jungfrau von Orleans; Boyd, Goethe's Poems; Goethe, Faust I and Auswahl aus Teil II; Friedenthal, Goethe, sein Leben und seine Zeit; and others. (3-0;3-0)

#### GER 412. (3) Baroque to Sturm und Drana

(3-0;3-0)

A survey of German poetry, drama, prose fiction and literary theory from the early seventeenth century (Baroque period) to the Enlightenment and the Storm and Stress movement. Comparisons with other contemporary art forms (e.g. painting, music, architecture) will be made.

Texts: M. Szyrocki, Die deutsche Literatur des Barock; Martin Luther, Ausgewählte Schriften; H. Cysarz (ed), Deutsche Barock-Lyrik; Grimmelshausen, Der Abenteuerliche Simplicisimus; Haller, Die Alpen; Gerstenberg, Ugolino; Goethe, Götz von Berlichingen; Goethe, Die Leiden des jungen Werthers; Schiller, Die Räuber; Lessing, Die Erziehung des Menschengeschlechts: and others.

(Not offered 1976-77; intend to offer 1977-78.) (3-0:3-0)

#### GER 413 (formerly 400). (3) Nineteenth-Century German Literature

An investigation of major and representative works of the nineteenth century with emphasis on the drama. The works will be considered against the intellectual and social background of the Age. Some of the questions to be pursued are: reactions to the Romantic movement; the rise of Realism; the political and social involvement of the younger writers; Biedermeier and the reflection of social values in literature; the effects of the Industrial Revolution on writers; the schism between urban and rural life; pessimistic determinism and optimistic materialism; regional litera-

Texts: Feise-Steinhauer, German Literature since Goethe, Part I. The Liberal Age 1830-1870. Additional texts will be announced.

#### GER 417. (3) The German Novelle

A study of the development of the German Novelle from Goethe to the

Texts: Representative Novellen from the works of Goethe, Eichendorff, Kleist, Büchner, Tieck, Gotthelf, Droste-Hülshoff, Stifter, Grillparzer, Keller, Raabe, Meyer, Storm, Mann, Kafka, and other modern writers.

(Not offered 1976-77; intend to offer 1977-78.)

#### GER 430. (3) Directed Reading Course

(By permission, for Honours or Major students.) (3-0;3-0)

## GER 490. (3) Honcurs Seminar and Graduating Essay

The seminar will meet regularly with the Honours advisor and/or the essay supervisor to help the student develop critical approaches to specialized materials, and to assist in preparation of a scholarly essay on an assigned topic. The essay must conform to acceptable standards of style and format, and be submitted before the end of second term classes. An oral examination covering the topic of the essay may be arranged. (3-0;3-0)

## DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Chairman of Department: appointment pending.

David F. Henn, B.A., M.A. (Durham), Assistant Professor (Spanish) and Acting Chairman of the Department to June 30, 1976. (On study leave 1976-77.)

Pablo Cabañas, Licenciado, Doctor en Filosofía y Letras, (Madrid), Professor (Spanish).

Caroline Monahan, B.A., M.A. (Brit. Col.), Ph.D. (London), Assistant Professor (Spanish).

Jerrold L. Mordaunt, B.A., M.A. (Utah), Ph.D. (Stanford), Assistant Professor (Spanish).

David C. McDougall, B.A., M.A. (Sheffield), Lecturer (Spanish).

Mary A. Kilmer-Tchalekian, B.A. (Elmira Coll.), M.A., Ph.D. (Texas), Sessional Lecturer (Spanish) (1975-76).

Gabriele Niccoli, B.A., M.A. (Brit. Col.), Sessional Lecturer (Italian) (1975-76).

Dolores Reventlow, B.A. (U. of Vic.), Sessional Lecturer (Spanish) (1975-76).

# NOTE: All students planning to take a concentration in a general programme

or Majors or Honours in the Department of Hispanic and Italian Studies must have at least two of the following: English at the 200 level; Linguistics 100 or 360; Latin 100 or equivalent; Classical Studies 100.

Students wishing to take courses in Spanish at the Third and Fourth Year levels are reminded that they must have the prerequisites of the first two years including Spanish 260 and Spanish 290. Exceptions may be

made with the permission of the Department.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours Programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. Spanish 290 should be taken in the Second Year and Spanish 302 in the Third Year. Students doing a General or Major in Spanish may take Spanish 260 in either the Second or Third Year.

An Honours programme in the Department of Hispanic and Italian Studies normally requires a total of 66 units over a four-year period.

Students specializing in Spanish (including Honours), will find that they have sufficient electives to enable them to concentrate in a second field for example, another language, Classics, English, History, Linguistics. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc. The Department Chairman will be happy to assist students with their selection of courses.

#### **PROGRAMMES IN SPANISH**

General - First Year: Spanish 100; Second Year: Spanish 260 and 290; Third and Fourth Years: Spanish 302 and six units of Spanish courses numbered 400 or above, selected with the approval of the Department.

Major — First Year: Spanish 100; Second Year: Spanish 260 and 290; Third and Fourth Years: Spanish 302 and twelve units in Spanish courses numbered 400 or above, selected with the approval of the Department.

Honours — First Year: Spanish 100; Second Year: Spanish 260 and 290; Third and Fourth Years: Spanish 302 and 420 and at least fifteen units of courses numbered 400 or above, selected with the approval of the Department.

## **COURSES**

#### SPANISH

#### SPAN 100. (3) Beginners' Spanish

Intensive oral method with grammar, composition, translation, and work in the language laboratory.

Text: Zenia Sacks da Silva, Beginning Spanish, 3rd edition, and Tape Manual-Workbook.

Members of the Department. (3-1;3-1)

#### SPAN 240. (3) Intermediate Spanish

Conversation, composition and grammar.

Texts: Marshall, et al., La fuente hispana; Zayas-Bazán and Lozano, Del amor a la revolución; and Usigli, El Gesticulador. (4-0; 4-0)

(NOTE: Students who intend to do major or honours work in Spanish should take Spanish 260 and Spanish 290).

#### SPAN 260. (3) Introduction to the Literature of Spain and Spanish America

(For students who intend to do major or honours work in Spanish. May also be taken as an elective.)

Study of modern authors, composition, and assigned themes.

Texts: Sender, Réquiem por un campesino español; García Lorca, Yerma; Lope de Vega, Fuenteovejuna; another text and an anthology to be announced.

D. C. McDougall, C. Monahan. (4-0; 4-0)

### SPAN 290. (3) Review Grammar and Conversation

(For students who intend to do major or honours work in Spanish.) This course should be taken in the Second Year. May also be taken as an elective.

Intensive review of grammar. Detailed study of the Spanish language.

Texts: Tarr, Centeno and Lloyd, A Graded Spanish Review Grammar with Composition; Adrian, Modern Spanish Prose.

D. C. McDougall, C. Monahan. (4-0; 4-0)

#### SPAN 302. (3) Advanced Composition and Stylistics

Intensive training in oral and written composition.

Texts: Neale-Silva, Lengua hispánica moderna; Crow-Dudley, El cuento; Collins Spanish Dictionary, ed. C. Smith.

#### SPAN 400. (3) The Spanish Realist Novel of the Nineteenth Century

Development of the Spanish novel from Romanticism to the end of the Nineteenth Century.

Students will be required to write essays on novels by Valera, Galdós, Pereda and Clarin.

Texts: Juan Valera, Pepita Jiménez; Galdós, Marianela, La de Bringas, Miau, Misericordia; Pereda, Sotileza; Clarín, La Regenta.

(May be offered 1976-77.)

(3-0; 3-0)

#### SPAN 401. (3) The Generation of 1898

A study of Spanish authors who sought a solution to the problems of Spain which followed the Spanish-American War.

Students will be required to write essays on the prescribed texts.

Texts: Unamuno, En torno al casticismo, San Manuel Bueno, mártir; Azorin, Visión de España; Baroja, El mayorazgo de Labraz, El árbol de la ciencia; Antonio Machado, Poesías completas.

P. Cabañas. (3-0; 3-0)

#### SPAN 402. (3) Cervantes

The life and works of Cervantes, with emphasis on Don Quijote and selected Novelas ejemplares.

Texts: Miguel de Cervantes, Don Quijote de la Mancha, Novelas ejemplares, Entremeses (Clásicos Castellanos).

(Not offered 1976-77.) (3-0; 3-0)

## SPAN 403. (3) Golden Age Poetry

Spanish poetry of the Golden Age (Sixteenth and Seventeenth Centuries). Not open to students who have credit in Spanish 403 prior to 1974-75.

Texts: Arthur Terry, An Anthology of Spanish Poetry, (Pergamon — 2 vols.); Garcilaso de la Vega, Poesías castellanas completas (Castalia); Fray Luis de León, The Original Poems (Manchester University Press); Fernando de Herrera, Poesías (Clásicos Castellanos); Luis de Góngora, Sonetos completos (Clásicos Castalia).

(May be offered 1976-77.)

(3-0; 3-0)

#### SPAN 405. (3) The Golden Age Novel, Excepting Cervantes

Development of the Spanish novel from the beginning of the sixteenth century to the end of the seventeenth century.

Texts: Alemán, Guzmán de Alfarache; Quevedo, El Buscón.

(Not offered 1976-77.)

(3-0;3-0)

#### SPAN 406. (3) Medieval Literature

Study of Spanish language and literature from 1140 to 1500.

Texts: López Estrada, Introducción a la literatura medieval española; Kohler, ed., Antología de la literatura española de la Edad Media.

(Not offered 1976-77.)

(3-0; 3-0)

#### SPAN 410. (3) Spanish Literature, 1700-1898

Main currents of the eighteenth and nineteenth centuries: Neo-Classicism, Romanticism, Realism.

Students will be required to write essays on the prescribed texts.

Texts: Meléndez Valdés, Poesías; Moratín, La comedia nueva, El sí de las niñas; Espronceda, Poesías, El estudiante de Salamanca; Zorrilla, Don Juan Tenorio; Galdós, Fortunata y Jacinta.

P. Cabañas.

(3-0; 3-0)

### SPAN 412. (3) Twentieth Century Spanish Literature

A study of the main trends in 20th century poetry, drama and prose with particular reference to texts detailed below.

Students will be required to write essays on the prescribed texts.

Texts: Valle-Inclán, Sonata de primavera, Sonata de estío, Romance de lobos, Luces de Bohemia; Pérez de Ayala, Prometeo, Belarmino y Apolonio; Cela, La familia de Pascual Duarte, La colmena; J. R. Jiménez, Segunda antolojía poética; García Lorca, Romancero gitano, Bodas de sangre, La casa de Bernarda Alba; Salinas, La voz a ti debida; Guillén, Cántico.

(Not offered 1976-77.)

(3-0; 3-0)

#### SPAN 413. (3) Golden Age Drama

Development of the Spanish theatre from the beginning of the 16th Century to the end of the 17th Century.

Not open to students who have credit in Spanish 403 prior to 1974-75.

Texts: Juan de la Cueva, Los siete infantes de Lara: Lope de Vega, Peribáñez and La dama boba; Guillén de Castro, Las mocedades del Cid; Luis Vélez de Guevara, Reinar después de morir; Alarcón, La verdad sospechosa; Tirso de Molina, El burlador de Sevilla; Calderón de la Barca, El médico de su honra, El alcalde de Zalamea, La vida es sueño, and La cena de Baltasar; Moreto, El lindo don Diego.

C. Monahan. (3-0:3-0)

#### SPAN 414. (3) Literature of Spanish America: I

The literature and literary trends of Spanish America from 1492 to c. 1880

Texts: Selections from Cortés, Cartas de relación and Inca Garcilaso, Comentarios reales; Sor Juana, Obras escogidas; Fernández de Lizardi, El periquillo sarniento; Sarmiento, Facundo; Blest Gana, Martín Rivas; Isaacs, Maria; Hernández, Martín Fierro; and selected readings from anthologies.

## SPAN 415 (formerly 404). (3) Literature of Spanish America: II

The literature and literary trends of Spanish America from c. 1880 to the present.

Not open to students who have credit in Spanish 404 prior to 1974-75.

Texts: Darío, Azul, Cantos, Otros poemas; Neruda, Residencia en la tierra; Quiroga, Cuentos; Borges, Ficciones; Rivera, La vorágine; Rulfo, Pedro Páramo and El llano en llamas; Argüedas, Los ríos profundos; García Márquez, Cien años de soledad; and selected writings from anthologies.

(Not offered 1976-77.) (3-0;3-0)

#### SPAN 420. (3) Advanced Composition, Translation and Stylistics

Intensive training in oral and written Spanish by means of regular practice in composition, translation and oral expression.

Prerequisite: Spanish 302

Texts: K. L. J. Mason, Advanced Spanish Course; Ensayos españoles, ed. G. E. Mazzeo; Collins Spanish Dictionary, ed. C. Smith.

## SPAN 425. (3) History of the Spanish Language

A study of the development of the Spanish language from its beginnings to the present day.

Prerequisite: 200 level in Spanish, including Spanish 290.

Texts: Spaulding, How Spanish Grew; Lapesa, Historia de la lengua esbañola.

(Not offered 1976-77.) (3-0;3-0)

### SPAN 430. (3) Directed Reading Course

For Honours and Major students.

(May be offered 1976-77.) (3-0; 3-0)

## **ITALIAN**

## ITAL 100. (3) First Year Italian

Introduction to the language with conversation, composition, grammar, reading exercises, practice in the language laboratory, and filmed presentations in Italian.

Text: Speroni-Golino, Basic Italian. (3-1;3-1)

#### ITAL 200. (3) Second Year Italian

Review of essential grammar, progressing into more advanced grammar; conversation, composition, practice in language laboratory, and filmed presentations in Italian.

Texts: Speroni-Golino, Leggendo e Ripassando; Buzzati, Un caso clinico (ed. Pia Raffaele and Margaret Cambone). (3-1:3-1)

#### ITAL 302. (3) Advanced Composition and Stylistics

Intensive training in oral and written composition.

(Not offered 1976-77.) (3-0; 3-0)

## ITAL 403. (3) Introduction to Medieval and Renaissance Italian Literature

A study of Italian literature from the thirteenth to the sixteenth century inclusive. Emphasis on the major works of the period. Taught in English. Some knowledge of Italian recommended.

Prerequisites: Open to Third and Fourth Year students and others with the permission of the instructor.

Texts: Boccaccio, The Decameron (Penguin Classics); Machiavelli, The Prince (Penguin Classics); Dante, Inferno (transl. by Dorothy Sayers); Penguin Book of Italian Verse (ed. George Kay). (3-0; 3-0)

## DEPARTMENT OF HISTORY

John Money, B.A., M.A., Ph.D. (Cantab.), Associate Professor, and Chairman of the Department. (On study leave 1976-77.)

Sydney W. Jackman, B.S., M.A. (Wash.), A.M., Ph.D. (Harvard), F.S.A., F.R.Hist.S., Professor.

Reginald H. Roy, C.D., B.A., M.A. (Brit. Col.), Ph.D. (Wash.), F.R. Hist.S., Professor.

Brian W. Dippie, B.A. (Alta.), M.A. (Wyoming), Ph.D. (Texas) Associate Professor. (On leave 1976-77.)

James E. Hendrickson, B.A. (Sask.), B.Ed. (Alta.), M.A., Ph.D. (Ore.), Associate Professor.

Jan Kupp, B.A., M.A., Ph.D. (Man.), Associate Professor.

Angus G. McLaren, B.A. (Brit. Col.), M.A., Ph.D. (Harvard), Visiting Associate Professor (1975-76).

Patricia E. Roy, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Brit. Col.), Associate Professor.

W. George Shelton, B.A., M.A. (Man.), Ph.D. (Pa.), Associate Professor. David A. T. Stafford, B.A., M.A. (Cantab.), Ph.D. (London), Associate Professor. (On leave 1976-77.)

Charlotte S. M. Girard, B.A. (Brit. Col), M.A., Ph.D. (Bryn Mawr), Assistant Professor.

Robert J. McCue, B.A., B.Ed. (Alta.), M.A., Ph.D. (Brigham Young), Assistant Professor.

Donald L. Senese, A.B., Ph.D. (Harvard), Assistant Professor. (On leave 1976-77.)

Phyllis M. Sherrin, B.A. (Tor.), M.A. (Carleton), Ph.D. (York), Assistant Professor.

E. Patricia Tsurumi, B.A. (Brit. Col.), A.M., Ph.D. (Harvard), Assistant Professor.

Wesley T. Wooley, A.B. (Ill.), A.M., Ph.D. (Chicago), Assistant Professor. Harry J. Bridgman, B.A. (Brit. Col.), M.A. (Queen's), Lecturer.

Stephen Duguid, B.A. (Ill.), M.A. (S.Fraser), Sessional Lecturer, Correctional Education Programme (1975-76).

Brian R. McCutcheon, B.A. (Man.), Ph.D. (Brit. Col.), Sessional Lecturer (1975-76).

Robert A. J. McDonald, B.A., M.A. (Man.), Sessional Lecturer (1975-76). Brian R. D. Smith, B.A., LL.B. (Brit. Col.), M.A. (Queen's), Part-time Lecturer (1975-76).

## **GRADUATE PROGRAMME**

For information on studies leading to the M.A. degree, see page 149; for graduate courses, see page 75.

## **UNDERGRADUATE PROGRAMMES**

The Department offers undergraduate course work at two levels: introductory courses at the 200 level, open to first and second year students; and advanced courses at the 300 and 400 level, open to students in both third and fourth years. Students are strongly advised to complete introductory courses in a given area before undertaking advanced courses in the same area. Students may not enrol in introductory courses after completing an advanced course in the same area; students may not enrol concurrently in introductory and advanced courses in the same area without written permission from the instructor in the advanced course. Please note that enrolment in seminars is limited and that the consent of the instructor is required for registration. In some instances, seminars in the fall term may be offered again in the spring term if there is sufficient demand.

All history courses require substantial written and reading assignments. Information about textbooks in all courses is available from the bookstore.

#### **GENERAL**

The General Programme consists of any 9 units of history courses numbered 300 and above in the third and fourth years. Students entering the General Programme should normally complete 6 units of introductory history courses in the first and second years.

#### MAJOR

To be admitted to the Major Programme, a student should have a C average in 6 units of introductory history courses. In his third and fourth years, the student must take a minimum of 15 units in history courses numbered 300 and above. Of these 15 units, a minimum of 6 and a maximum of 12 units should be selected from one area of interest. In addition, 9 units of non-history courses must be selected in consultation with the department advisor to Majors. Students interested in majoring in history are advised to consult the Majors advisor in their first year if possible. Majors must have their third and fourth year programmes approved by the Majors advisor.

#### **HONOURS**

In the Honours Programme, students have the opportunity to study history more independently and intensively than is normally possible in the Major and General Programmes. Through small seminars, directed readings, and individual instruction in writing and research, the Honours Programme encourages students to think critically and to deepen their understanding of both the content and the craft of history. While the primary intent of the Honours Programme is to help any interested and talented student of history achieve an excellent education in the liberal arts, the Programme should be especially useful for students contemplating graduate work in history or careers in high school teaching, journalism, law, library science, or government service.

The Honours Programme normally consists of 33 units of course work in

the combined third and fourth years as follows:

Third Year		Fourth Year	
History 491 (Seminar)	11/2 units	History 491 (Seminar)	11/2 units
History 498	11/2 units	History 499 (Essay)	4½ units
Advanced History	9 units	Advanced History	3 units
Related non-History	3 units	Related non-History	3 units
Elective	3 units	Elective	3 units
	18 units		15 units

In addition, Honours candidates before graduation must demonstrate a reading knowledge of a language other than English by passing (with at least a C) either a two hundred level language course or a special language examination.

Admission to the Honours Programme requires a high second class standing in six units of history courses or seminars. Applications for admission should normally be made in the spring, during the student's second year of study, although a small number of third year applications may also be

accepted.

Honours candidates are required to have their programme of courses approved by the Honours advisor. To avoid overspecialization, Honours students are encouraged to study more than one area of history and to choose several courses outside the Department of History. Candidates whose performance is unsatisfactory may be required at any time to transfer from the Honours to the Major Programme. Admission to the fourth year of the Honours Programme is conditional upon satisfactory performance in the third year.

First and second class honours degrees may be awarded. A first class degree requires a first class graduating average and at least a B+ in History 499. A second class degree requires a second class graduating

average and at least a C+ in History 499.

## **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

N.B. A brochure will be available through the departmental office before the September registration period, and will include any changes in scheduling made after publication of the University Calendar.

## INTRODUCTORY COURSES

Please note — first year students may enrol in introductory courses at the 200 level.

#### HIST 205. (3) Introduction to History

This course is designed to introduce students to the kinds of questions historians ask about the past. The subject matter may vary according to the particular area of specialization of the instructor, and students are advised to consult the Department about the specific topic to be considered in any given year. (3-0; 3-0)

#### HIST 210 (formerly 212). (3) History of the United States

A general survey of the history of the United States of America from the colonial period to the present. This course is strongly recommended to students wishing to take advanced courses in American history. (3-0; 3-0)

## HIST 220 (formerly 201). (3) History of England

History 220 is designed as a course for those who wish some acquaintance with the broad sweep of British history since the Norman Conquest. It may be used as a terminal course, complete in itself, or it may be used as a preliminary to more intensive study. This course is strongly recommended to students wishing to take advanced courses in British history.

S. W. Jackman. (3-0; 3-0)

#### HIST 230 (formerly 102). (3) History of Canada

A survey of Canadian development from the beginnings of the French regime to the present. This course is strongly recommended to students wishing to take advanced courses in Canadian history.

Members of the Department.

(3-0; 3-0)

## HIST 234 (formerly 400). (3) Main Currents of Western Thought

A survey of the most influential ideas and intellectual movements of western culture from their origins, in Greece and the Middle East, to recent times. Not open to students who have credit for History 400.

W. G. Shelton. (3-0; 3-0)

#### \*HIST 236. (3) Medieval Europe

Europe from the fall of the western Roman Empire to the Renaissance: a survey of feudalism, manorialism, the church, and the political and intellectual life that characterized the middle ages.

R. J. McCue. (3-0; 3-0)

## \*HIST 240 (formerly 200). (3) History of Modern Europe

After providing a brief background in medieval institutions, this course surveys European history from the Renaissance to the early twentieth century. The lectures will focus on political, intellectual, cultural, and social aspects of European society and the modern state as it emerges in the contemporary world. This course, or History 236, is strongly recommended to students wishing to take advanced courses in European history. There are no prerequisites.

C. S. M. Girard, R. J. McCue. (3-0; 3-0)

## HIST 242 (formerly 101). (3) Main Currents in Twentieth Century History

This course offers a background for contemporary world problems, surveying major historical developments of the twentieth century.

Members of the Department.

(Not offered 1976-77; will be offered 1977-78.) (3-0; 3-0)

#### HIST 252. (3) Introduction to Chinese and Japanese Civilizations

The purpose of this course is to introduce the student to the traditional civilizations of China and Japan. Though a survey of many thousands of years in so short a space of time must of necessity be selective, the course will consider topics in the political, social, intellectual and economic history of the two civilizations.

Students interested in this course may also be interested in Chinese 301.

E. P. Tsurumi. (3-0; 3-0)

## ADVANCED COURSES

## **AMERICAN**

## HIST 300 (formerly 401; 311). (3) Colonial North America

The British American colonies from their founding to the disruption of the first British Empire, with emphasis on intellectual, social, and economic development. (3-0; 3-0)

\*History 236 and History 240 are both introductory courses to European history and as such are recommended to all Major and Honours candidates as well as to students who are not intending to specialize in history.

## HIST 301 (formerly 312). (3) The United States in the Nineteenth Century

A study of the social, political, cultural, and economic development of the United States in the period from the framing of the Constitution to the Spanish-American War, with particular concentration on certain significant themes (3-0:3-0)

## HIST 304 (formerly 412). (3) The United States in the Twentieth Century

A study of the personalities and problems of the United States in the twentieth century. The course will emphasize the reform tradition from the Progressive movement to the Great Society. Diplomatic, economic, and social developments will be surveyed. (3-0:3-0)

## HIST 308 (formerly 428). (3) American Intellectual History

A study of the evolution of American institutions and ideas. Emphasis will be given to selected aspects of the nation's cultural life.

## HIST 310 (formerly 403). (3) The American West

The frontier in American history, the Trans-Mississippi West with emphasis on the Far West. (3-0:3-0)

## HIST 315 (formerly 430). (3) American Diplomatic History

A study of American foreign relations with emphasis on the twentieth century and the history of American diplomatic thought.

## HIST 319. (11/2 or 3) Seminar in American History

Selected topics in American history. Enrolment limited, and consent of instructor required for registration. Students are advised to consult the Department about the specific topics to be considered. (3-0) or (3-0; 3-0)

#### BRITISH

#### HIST 321 (formerly 318). (3) England, 1485-1660

England from Medieval Monarchy to political revolution: an intensive study of English history from the end of the War of Roses to the Civil War, Commonwealth, and Restoration of Charles II.

## HIST 323 (formerly 418). (3) Britain, 1660-1815

Britain from political to industrial revolution: an intensive study of the roots of political stability and of social change, and of the consequences of their interaction in Britain during the later seventeenth and eighteenth centuries. (3-0; 3-0)

## HIST 325 (formerly 419). (3) Britain, 1815-1914

Great Britain, industry and empire: an intensive study of British history during the nineteenth century.

S. W. Jackman.

(3-0; 3-0)

## HIST 327 (formerly 421). (3) Twentieth Century Britain

Britain in the twentieth century - war, labour, and the aftermath of empire. The course may be a combination of lectures and class discussion. Topics to be investigated may vary from year to year, but will always include foreign policy, the rise of the Labour Party, and economic affairs.

(3-0; 3-0)

## HIST 330 (formerly 402; 411). (3) Empire and Commonwealth

A study of British imperial evolution from the disruption of the First British Empire to the present. (3-0:3-0)

## HIST 338. (1 1/2 or 3) Seminar in British History

Selected topics in British history. Enrolment limited and consent of in-structor required for registration. Students are advised to consult the Department for an outline of the topics to be considered. (3-0:3-0)

#### CANADIAN

## HIST 340 (formerly 302). (3) New France

A study of the history of the French regime in Canada from 1500 to 1763. The course will deal with the economic, social, and political aspects of the history of New France, as well as the forces in New England, France, and Holland that influenced the development of New France.

J. Kupp. (3-0; 3-0)

## HIST 342 (formerly 326). (3) British North America, Conquest to Confederation

A combination of lectures and seminars examining the development of the economy, society, and culture of the area comprising present-day Ontario, Quebec, and the Maritimes. Particular emphasis will be placed upon the emergence of distinct social and cultural entities in each of these

H. J. Bridgman. (3-0:3-0)

## HIST 344 (formerly 426). (3) Canada Since Confederation

A study of recurring themes and problems in Canadian history including national policies, French-English tensions, federal-provincial conflicts, and external relations. Attention will be given to the social and economic background of these problems as well as to their political manifestations.

(3-0; 3-0)

## HIST 348. (3) Social and Intellectual History of Canada

A thematic study of the major intellectual and social attitudes, values, assumptions, and expectations in nineteenth- and twentieth-century Canada. Students will examine original works by Canadians in a number of disciplines including history, politics, the social sciences, literature and art. A reading knowledge of French is recommended but not required.

Prerequisite: History 230 or written consent of the instructor.

H. J. Bridgman. (3-0; 3-0)

### HIST 350 (formerly 303). (3) The Canadian West

After a brief sketch of the fur trade and early settlement, this course concentrates on the history of the West after 1870-1871. Among the themes examined are the relationships of the region with the federal government, economic development, and the effects of immigration. Approximately two-thirds of the course is devoted to the prairie region and one-third to British Columbia

Students may not take both History 350 and 355 (British Columbia since 1885) without the written consent of the instructor.

P. E. Roy. (3-0; 3-0)

## HIST 352. (3) French Canada

A study of select problems in French Canadian history stressing patterns in intellectual, social and economic development, emphasizing the nineteenth and twentieth centuries. This course will be taught as a seminar, and will be offered in alternate years only.

Prerequisite: History 230, and a reading knowledge of French, or written consent of the instructor.

(Not offered 1976-77; will be offered 1977-78.) (3-0; 3-0)

## HIST 354. (11/2) British Columbia to 1900

British Columbia from the coming of the white man to the emergence of provincial political parties about the end of the nineteenth century. An examination of the foundations of modern British Columbia, including such topics as early exploration and settlement, the role of the Hudson's Bay Company, the colonies of Vancouver Island and British Columbia, and the origins of institutional life.

Prerequisite: History 230 or written consent of the instructor.

J. E. Hendrickson. September-December; also January-April. (3-0)

## HIST 355. (11/2) British Columbia Since 1885

The emphasis will be on social, economic, and political developments within the province. Written assignments will be required.

Students may not take both History 350 and 355 without written consent of the instructor.

P. E. Roy. January-April only. (3-0)

## HIST 356 (formerly 420). (3) Canadian Constitutional History

A study of the evolution of the Canadian Constitution from 1763 to the present.

## HIST 358. (1 1/2 or 3) Topics in Canadian History

An intensive study of selected aspects of Canadian history. Students are advised to consult the Department for an outline of the topics to be con-(3-0) or (3-0; 3-0) sidered.

#### HIST 359. (1 1/2 or 3) Seminar in Canadian History

Selected topics in Canadian history. Enrolment limited and consent of instructor required for registration. For details of topics to be considered in 1976-77, students should consult the departmental brochure, available before September registration. (3-0) or (3-0; 3-0)

NOTE: History 494 may also be counted as a course in Canadian history.

#### **EUROPEAN**

## HIST 360. (1 1/2) The Renaissance

A study of the conditions, ideas, and men involved in the intellectual quickening that ushered in the early modern period of European history.

R. J. McCue.

September-December only. (3-0)

#### HIST 361. (11/2) The Reformation

A history of the men, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations.

R. J. McCue.

January-April only. (3-0)

#### HIST 362 (formerly 314). (3) Europe under the Ancien Régime

Europe from the Peace of Westphalia through the age of Louis XIV to the beginning of the revolutionary period. Emphasis will be on the political, cultural and social history of Western Europe. Students who received credit in History 362 (formerly 314) prior to 1975-76 may not enrol in this course.

Prerequisite: History 240 or written consent of the instructor.

(Not offered 1976-77; will be offered 1977-78.)

(3-0; 3-0)

#### HIST 363 (11/2) Revolutionary and Napoleonic Europe

A study of the French Revolution and its impact on Europe in the late 18th and early 19th centuries. Students who received credit in History 362 (formerly 314) prior to 1975-76 may not enrol in this course.

Prerequisite: History 240, or written consent of the instructor.

C. S. M. Girard. (3-0)

## HIST 364 (formerly 415). (3) International History of Europe in the Nineteenth

An analysis of the major international developments in Europe from the Napoleonic Wars to World War One. Students who received credit in History 364 (formerly 415) prior to 1975-76 may not enrol in this course.

Prerequisite: History 240, or written consent of the instructor. (3-0; 3-0)

## HIST 365 (3) Social, Cultural and Political History of Modern Europe

An examination of the social, cultural and political consequences of the commercial and industrial revolutions in modern Europe. Topics to be covered will include the effects of economic change on social structure, and the influence on political institutions of the growth of cities, the evolution of common culture and the development of popular movements, both radical and conservative.

Prerequisite: History 240, or written consent of the instructor. (3-0; 3-0)

## HIST 366. (3) Europe in the Twentieth Century

An examination of the changing nature of the relations between European states following the Treaty of Versailles and of the interaction between these and major political, social and economic changes. Approximately half the course will deal with the period since 1945.

Prerequisite: History 240 or 242, or written consent of the instructor. C. S. M. Girard. (3-0; 3-0)

#### HIST 368. (3) Ideas and Events in Modern Europe

Political and social thought in Europe since the seventeenth century. The emphasis will be on the interaction between thinkers and their times, with the most significant ideas and intellectual movements being examined in their social and political contexts. Although special attention will be given to the origins of twentieth century conceptions of popular sovereignty, nationalism, revolution, and the state, other aspects of culture will also be discussed.

W. G. Shelton. (3-0; 3-0)

#### HIST 370 (formerly 406). (3) France, 1789-1958

France from the end of the Ancien Régime to the advent of the Fourth Republic, a study in her political, social, cultural, and economic development. The emphasis will be upon the social and cultural aspects of the Third Republic (1870-1945). A reading knowledge of French is desirable but not required. (3-0; 3-0)

#### HIST 372. (3) Modern Germany, 1871-1961

The main theme of the course will be the "German problem," defined both in terms of Germany's internal political, social, and economic development, and in terms of its relations with the rest of Europe—a problem culminating in the Nazi period but not solved by the defeat of 1945. The course will therefore include consideration of post-war Germany.

Prerequisite: History 240 or 242, or written consent of the instructor.

(3-0; 3-0)

## HIST 374 (formerly 317). (3) Imperial Russia, 1689-1917

A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change.

(3-0; 3-0)

#### HIST 376 (formerly 417). (11/2) The Soviet Union

A history of the USSR from 1917 to the present. The course will analyze the forces that have moulded the policies of the Communist leadership and examine how these policies have affected the shape of Soviet society and the role of the Soviet Union in world affairs.

September-December only. (3-0)

#### HIST 380. (3) Problems in Medieval Europe

A detailed study of selected problems in the history of Medieval Europe. Among the problems to be considered are the development of feudalism, manorialism, the Pirenne thesis, the investiture controversy, and the twelfth century renaissance. Students will be required to read intensively in the problem areas and will also make a seminar presentation.

It is recommended that students have credit for History 236 before registering in this class.

(Not offered 1976-77; will be offered 1977-78.)

(3-0; 3-0)

## HIST 388. (1 1/2 or 3) Topics in European History

An intensive study of selected aspects of European history. Students are advised to consult the Department for an outline of the topics to be considered. (3-0) or (3-0; 3-0)

### HIST 389. (11/2 or 3) Seminar in European History

Selected topics in European history. Enrolment limited and consent of instructor required for registration. For details of topics to be considered in 1976-77, students should consult the departmental brochure, available before September registration. (3-0) or (3-0; 3-0)

## HIST 390 (formerly 339). (3) War in the Modern World, 1755 to the Present

A survey of European military history from the Seven Years' War to the present day. It covers the change from the limited warfare of the early eighteenth century to the unlimited warfare of the twentieth century. Emphasis is placed on the causes of war, the impact of new inventions on tactics and strategy, and the social, political, and economic results of wars on society up to and including the atomic age.

R. H. Roy. (3-0; 3-0

NOTE: For Major in European History, Classical Studies 330 or 340 may also be counted as a course in European History.

#### ASIAN

## HIST 434. (3) Modern China

An intensive study of developments in China during the nineteenth and twentieth centuries. (3-0; 3-0)

#### HIST 436 (formerly 414). (3) Transformation of Japan from a Feudal Country to a Modern Industrial Nation

The purpose of this course is, through a combination of lectures, student presentations, discussions and papers, to examine some of the problems which occur in the history of nineteenth and twentieth century Japan.

The format requires student participation throughout the course. Students are required to make class presentations, submit one short analytical paper and do one long research paper on a topic of their own choice.

Prerequisite: History 252 or permission of the instructor.

E. P. Tsurumi

(3-0; 3-0)

#### SPECIALIZED COURSES

#### HIST 490. (1 1/2 or 3) Directed Reading

Students wishing to pursue a course of directed reading should, together with a Faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Chairman of the Department. Students may take this course for a total of 6 units, but not more than 3 units in any given year.

Members of the Department.

#### HIST 491 (formerly 333). (1 1/2 or 3) Honours Seminar

A seminar devoted to studying the discipline of history. The course is intended to be taken by Honours students in both the Third and Fourth Years but is also open to students not in the Honours programme who have the consent of the instructor. The number of units to be offered in 1976-77 is 11/2 for each Year.

## HIST 492 (formerly 433). (1 1/2 or 3) Seminar in Historiography

This course is designed to introduce students to the history of the writing of history. Enrolment limited and consent of instructor required for registration. The number of units to be offered in 1976-77 is 11/2.

C. S. M. Girard. (3-0)

## HIST 494 (formerly 439). (3) Seminar on Canadian Defence and External Policy, 1867-1967

An intensive study of selected aspects of Canada's role as a middle power. Emphasis will be given to the diplomatic, military, and strategic role of Canada during the twentieth century. Enrolment limited.

Prerequisites: History 230 or consent of instructor required.

R. H. Roy.

(3-0; 3-0)

## HIST 498. (11/2) Honours Tutorial

Directed reading offered by the instructor supervising a student's graduating essay.

Members of the Department.

## HIST 499. (41/2) Graduating Essay in Honours

The preparation of a research paper from 50-100 pages in length under the direction of a member of the Department. The essay must conform to acceptable standards of style and format, and is due one week before the final day of lectures. There is, in addition, an oral examination on the field covered in the graduating essay.

Members of the Department.

## **GRADUATE COURSES**

Students should consult the Department concerning specific content of the courses offered in any given year.

HIST 510 (formerly 512). (3) Seminar in American History

W. T. Wooley.

HIST 520 (formerly 501). (3) Seminar in British History

HIST 530 (formerly 526). (3) Seminar in Canadian History

HIST 531 (formerly 503). (3) Seminar in B.C. History

HIST 532 (formerly 539). (3) Seminar in Canadian Defence Policy

R. H. Roy.

HIST 540 (formerly 505). (3) Seminar in European History

HIST 580. (3) Seminar in Specialized Topics

HIST 590. (3) Directed Reading

(Offered as required.)

HIST 595. (3) Extended Research Paper

HIST 599. (12) M.A. Thesis

## LIBERAL STUDIES PROGRAMME

Director: S. W. Jackman, B.S., M.A. (Wash.), A.M., Ph.D. (Harvard), F.S.A., F.R.Hist.S., Professor, History.

The interdisciplinary Liberal Studies Programme, which was approved by the Senate in 1975, is an experimental programme designed to provide a general education, thereby broadening the intellectual and cultural life of those undergraduates who participate in a defined course of study. To be accepted in the programme an overall standing of at least second class (a grade point average of 3.5) is required. Each undergraduate will have an individual course of study approved by the Director. The undergraduate must study the same science, the same language, the same social science, and literature for two years; further, he must study a different science and a different social science for one year. In addition, the undergraduate must enrol in courses in art, music, theatre, mathematics, history, and philosophy for one year; further, the undergraduate is required to enrol in Liberal Arts 305 and also in a Liberal Studies Seminar. The undergraduate is required to maintain an overall standing of at least second class and, finally, to pass an examination in Liberal Studies. Upon satisfactory completion of the programme, the degree of Bachelor of Arts with a Major in Liberal Studies will be awarded.

The undergraduate may pursue either the regular Major Programme, or in cases of special merit, the Major Programme with an emphasis on a specific topic or discipline rather than one of the traditional courses of

Should an undergraduate wish further concentration in a discipline, he may, after consultation with the Director, take the courses prescribed for the General Programme in that specific discipline and so modify his special

Students interested in the Liberal Studies Programme should consult the Director. All programmes must be approved by the Director. Normally, undergraduates will enter the Programme in their second year.

#### PROGRAMME REQUIREMENTS

1. Major: 60 units

English 121 and 122 (3 units), in Year I or II

Literature (3 units)

Language Sequence (6 units)

Science Sequence (6 units), see Note 1 below

Social Science Sequence (6 units), see Note 2 below

Art 100 (3 units)

Music 115 (3 units)

Theatre (3 units): one of Theatre 310, 311 or 312, or English 413

Mathematics (3 units), at the the 100 level

History (3 units)

Science Complement (3 units), see Note 3 below

Social Science Complement (3 units), see Note 4 below

Philosophy 102 (3 units), special section in Year IV

Liberal Arts 305 (3 units), in Year II

Liberal Studies Seminar (3 units), in Year IV

Electives (3 units), at the 300 or 400 level

2. Major with Discipline or Topic Emphasis: 60 units

English 121 and 122 (3 units), in Year I or II

Language Sequence (6 units)

Science Sequence (6 units), see Note 1 below

Fine Arts (6 units), two of Art 100, Music 115, Theatre 310, 311, 312, or English 413

History (3 units)

Philosophy 102 (3 units), special section in Year IV

Liberal Arts 305 (3 units), in Year II

Liberal Studies Seminar (3 units), in Year IV

General Programme requirements in selected disciplines or in case of special merit, chosen under direction with topical emphasis (12 units)

9 units, under direction, to complete as many of the omissions as can be accommodated consistent with co- or prerequisite requirements of the elected General Programme or topic; the omissions are one of Fine Arts, Mathematics, the additional Literature course, the Science Complement (see Note 3 below), the Social Science Complement (see Note 4 below)

#### NOTES:

- Science Sequence refers to 6 units in one of Biology, Chemistry or Physics, 3 units at the 100 level and 3 units at no lower than the 200 level.
- Social Science Sequence refers to 6 units in one of Anthropology, Economics, Geography, Linguistics, Political Science, Psychology, or Sociology, 3 units at the 100 level and 3 units at no lower than the 200 level.
- Science Complement refers to 3 units at the 100 level in Astronomy, Bacteriology, Biology, Chemistry, or Physics in a science not selected for the Science Sequence.
- 4. Social Science Complement refers to 3 units at least at the 100 level in a Social Science not selected for the Social Science Sequence.

## LIBERAL ARTS COURSE

#### LA 305. (3) The Background of Western Literature

The aim of the course is to investigate some of the origins of Western man and his society. By means of works that are considered significant and by means of lectures on specific topics, the course will examine various lines of development in western civilization. Instructors from different departments form the course committee and lead the weekly seminars. Lecturers from other departments are invited to talk to the class. While the format of the course is flexible, the normal procedure is a one-hour lecture, followed by a two-hour seminar in which the topic of the week is discussed in depth. Seminar groups are arranged on a quarterly basis and at the end of each quarter the student changes both group and instructor, so that during the course of the year he will come into contact with instructors from different disciplines.

Liberal Arts 305 carries elective credit in any degree programme. Certain departments accept the course towards a major; students should con-

sult their own department for advice.

Prerequisite: A 6.0 Grade Point average or permission of the Course Chairman or of the Director of the Liberal Studies Programme.

G. G. Miller, C. W. Tolman, J. R. Waelti-Walters (Course Chairman, 1976-77). (1-0-2; 1-0-2)

## DEPARTMENT OF LINGUISTICS

M. H. Scargill, B.A., Ph.D. (*Leeds*), F.R.S.C., Professor and Head of the Department. (On study leave 1976-77.)

Geoffrey N. O'Grady, B.A. (Sydney), Ph.D. (Indiana), Professor.

Joseph F. Kess, B.S. (Georgetown), M.A., Ph.D. (Hawaii), Associate Professor.

Ralph Vanderslice, B.A., M.A. (Mich. St.), Ph.D. (U.C.L.A.), Visiting Associate Professor (1975-76).

Henry J. Warkentyne, B.A. (West Ont.), M.A., Ph.D. (London), Associate Professor.

Barry F. Carlson, M.A. (Colo.), Ph.D. (Hawaii), Assistant Professor.

Thomas M. Hess, B.A. (Colo.), M.A., Ph.D. (Wash.), Assistant Professor.

Thomas E. Hukari, B.A. (Ore.), M.A., Ph.D. (Wash.), Assistant Professor.

James Arthurs, B.A. (Durham), M.A. (U. of Vic.), Lecturer.

David H. Dunsmuir, B.A. (Tor.), M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).

Barbara P. Harris, B.A. (Carleton), M.A., Ph.D. (U. of Vic.), Part-time Sessional Lecturer (1975-76).

Ruby Peter, Part-time Sessional Lecturer (1975-76).

Ronald W. Wickstrom, B.Sc. (Brit. Col.), M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).

Peter J. Wilson, B.A. (McGill), Part-time Sessional Lecturer (1975-76).

## **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and Ph.D. degrees, see page 150; for graduate courses, see page 78.

## **PREREQUISITE**

Unless otherwise stated, the prerequisite for any course in Linguistics is some knowledge of a language other than English, or permission of the Department. Except by permission of the Department, students with first or second year standing may not take courses numbered 300 or higher.

## **INDIVIDUAL COURSES**

Students who wish to take just one or two courses in Linguistics, rather than a full programme, may be interested in the following courses. Linguistics 100 is a course of general interest at the first-year level and 230 at the second-year level. Linguistics 360 is a senior Linguistics course of general interest, although it is of special value to students in Classical and Modern Languages. Linguistics 390 is intended for students who have a particular interest in the English Language. Linguistics 220, 340, 361 and 400 should be of interest to students in Anthropology who wish to have some training in the techniques of analysing and recording languages they may meet in the field. Linguistics 100, 250, and 420 should be of interest to students in Classical and Modern Languages. Linguistics 481 and 482 should be of interest to students in the sciences and humanities who are interested in the application of computer techniques and principles. Linguistics 250, 370 and 380 are of special concern to students with an interest in phonetics and speech therapy, 392 for students interested in the distinctive features of Canadian English. Linguistics 371 is valuable for students who wish to enter the area of teaching English as a second language. Linguistics 426 is valuable for students who wish to enter the area of teaching French.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

General — Students who wish to proceed to the B.A. degree under the regulations for the General Programme and who wish to study Linguistics as one of their fields of concentration are urged to take one of the following as their second field of concentration: Anthropology, Classical or Modern Languages, English, Mathematics, Psychology.

Students who begin the study of Linguistics as one of their fields in the General Programme in their first or second year should take Linguistics 100, and then at least three senior courses in Linguistics in their third

and fourth years.

Students who begin the study of Linguistics as one of their fields in the General Programme in their third or fourth years should take Linguistics 360 or 361 and at least two other senior courses in Linguistics.

Major — Students who wish to proceed to the B.A. degree with a Major in Linguistics are urged to offer supporting courses in one of Anthropology, Classical or Modern Languages, English, Mathematics, Physics, Psychology.

Students who begin the study of Linguistics as a Major in their first or second years should take Linguistics 100 and 250, and then 15 units of senior courses in Linguistics in their third and fourth years, including Linguistics 340.

Students who begin the study of Linguistics as a Major in their third or fourth years and who have not taken Linguistics 100 and 250 should take Linguistics 360 or 361 and 12 units of other senior courses in Linguistics.

Honours — Students who wish to take an Honours Programme in Linguistics begin the programme in the third year with permission of the Department. Honours students must: (a) achieve at least a B average in all Linguistics courses taken in each of the third and fourth years and maintain a second-class average in all work of the third and fourth years; (b) present a 3 unit senior Linguistics course in each of the third and fourth years additional to those required for the major, one of which must be Linguistics 499.

Students who meet the above requirements will be recommended for Honours degrees as follows. Successful completion of all courses together with the following graduating average: First Class Honours, 6.5 or higher; Second Class Honours, 3.5 to 6.4. Students who fail to achieve a graduating average of 3.5 will be allowed to transfer to the Major or General Programme.

## SAMPLE PROGRAMME FOR A MAJOR IN LINGUISTICS

With a concentration of electives in English

Year

I. Linguistics 100

English 111/115, 121/122

A language

Elective (Philosophy 202 recommended)

Elective (A Science course recommended)

#### II. Linguistics 250

English 200, 204 or 205

The language begun in the first year

Elective (If Linguistics 100 has not been taken, it must be taken here.)

## III. Linguistics 390

Linguistics 370 or 380

Linguistics 340

English 400 or a senior English course by permission of the Department. Elective (If no previous Linguistics courses have been taken, Linguistics

360 or 361 will be taken here.)

## IV. Linguistics 392 or elective

Linguistics 430

Linguistics 371

English 440

A senior English course

Students in English who wish to have Linguistics as a second area of concentration should take Linguistics 100 and at least three senior Linguistics courses, including Linguistics 390 and Linguistics 392 and 371. Students in English who begin the study of Linguistics in their third year may satisfy the requirements for Linguistics as an area of concentration by taking Linguistics 360 or 361 and two other 3 unit senior Linguistics courses, Linguistics 390, and Linguistics 371 or 392.

#### UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April.

## LING 099. (0) English as a Second Language

A non-credit course in English as a Second Language for students whose native language is not English — see page 11 for regulations governing such students. Successful completion of this course may be required at the discretion of individual departments.

Text: Rutherford, Modern English; Danielson and Hayden, Using English.

Members of the Department.

(3-0; 3-0)

## LING 100. (3) Introduction to Linguistics

The nature of language as a means of communication and an integral part of culture. Methods of language description. Analysis of speech sounds, words, and sentences. Language families of the world. Historical development of languages. Selected topics in applied linguistics, psycholinguistics, sociolinguistics, and anthropological linguistics. Selection of illustrative materials will be drawn from a number of languages within each section. Students are advised to take the selection which meets their interests or which is required by the Department or Faculty in which they intend to complete a degree: Sec. A-01 and A-02, English; Sec. C, Romance languages; Sec. D, Germanic languages; Sec. E, Slavonic and Oriental languages; Sec. F, Anthropology.

Text: To be announced.

Members of the Department.

(3-0; 3-0)

## LING 220. (3) Language and Culture

Language as an expression of culture and as a means of delineating cultural boundaries.

Text: To be announced.

B. F. Carlson, T. M. Hess. (3-0; 3-0)

## LING 230. (3) Introduction to Semantics

A presentation of various approaches used to describe and explain how language conveys meaning. The course will centre on questions such as types and levels of meaning, the notion of signs and semantic fields, methods of analysis and recording of differences in meaning, as proposed by various scholars. Recent developments such as generative semantics will be introduced, as well as systematic attempts to deal with meaning and style. A brief introduction will also be given to symbolic systems in different cultures.

I. Arthurs. (3-0; 3-0)

## LING 240. (3) Studies in Indian Languages of British Columbia

The application of linguistic principles to the preparation of grammars and dictionaries of languages indigenous to British Columbia.

Prerequisite: Total fluency in an Indian language of British Columbia. T. M. Hess. (3-0; 3-0)

## LING 250. (3) Phonology

This course will deal with the theory of the production and nature of speech sounds in general, and provide practice in recognizing, transcribing, and producing a wide variety of such sounds. Attention will be given to the ways in which the sound systems of particular languages are structured.

This is a laboratory-type course, and the final grade is largely based on

work completed there and on outside assignments.

Prerequisite: Lingustics 100 or permission of the Department.

Texts: Smalley, Manual of Articulatory Phonetics; Schane, Generative Phonology.

G. N. O'Grady. (3-0; 3-0)

## LING 340 (formerly 460). (3) Morphology and Syntax

Techniques and theory in the analysis of words (morphology) and sentences (syntax) from structuralism to generative grammar. Topics include descriptive techniques in a structuralist model, early transformational grammar, a transformational analysis of English, and recent developments in linguistic theory, including generative semantics. This course is designed for students whose interest is techniques of language analysis, especially for those in Linguistics and in Anthropology who may wish to work with languages not previously given a grammatical analysis. Examples from languages other than English may be used.

Prerequisite: Lingustics 100 or equivalent or permission of the Depart-

Texts: To be announced.

T. E. Hukari. (3-0;3-0)

#### LING 360. (3) General Linguistics

An introduction to Linguistics intended for students with no previous knowledge of the subject who desire a single senior course or who wish to begin the study of Linguistics in their senior years. This course will cover, at the level expected in senior courses, the material listed in Linguistics 100. Not open to students with Linguistics 100.

Texts: Langaker, Fundamentals of Linguistic Analysis.

G. N. O'Grady. (3-0; 3-0)

## LING 361. (3) Anthropological Linguistics

Language in relation to culture, semantics, and as an ethnographic tool. Intended for students with no previous knowledge of Linguistics.

This course is not open to students who have credit in or who are taking Linguistics 100 cr 220.

Prerequisite: An introductory course in Anthropology.

Text: To be announced.

(Not offered 1976-77; will be offered 1977-78.) (3-0; 3-0)

## LING 370 (Psychology 370). (3) Psycholinguistics

Linguistics 370 is offered in collaboration with the Department of Psychology. A course in the psychology of language, covering such topics as the nature and function of language; language acquisition, experimental psycholinguistics, the relationship of language and cognition, language and socio-cultural factors, semantics, bilingualism, non-verbal communication, and the pathology of linguistic behavior. (This course alternates with Linguistics 570.)

Prerequisite: Linguistics 100 and Psychology 100, or permission of instructor or department.

Texts: To be announced.

(Not offered 1976-77; will be offered 1977-78.) (3-0; 3-0)

#### LING 371. (3) Applied Linguistics

The application of contrastive phonemics, morphology, syntax and lexicon as the basis for the preparation of grammars, dictionaries, and workbooks in English for non-native English speakers.

Prerequisites: Linguistics 100 or permission of instructor.

Texts: The Edinburgh Course in Applied Linguistics.

H. J. Warkentyne. (3-0; 3-0)

## LING 372. (3) Native Languages of the Pacific Northwest

The native languages of the Pacific Northwest are both unique and numerous. Extending from Oregon to Southern Alaska, from the Queen Charlotte Islands to the prairies of the continental interior are a number of large language families and hundreds of individual languages. For longer than a century their uniqueness has attracted scholars from all over the world, and yet much is still unknown. The survey will look at each family in turn and also study the structure of a representative language within each family. On this basis, the language history and broader areal relationships of each family will be approached.

Prerequisite: A previous course in Linguistics.

B. F. Carlson. (3-0; 3-0)

#### LING 373. (3) The History of Linguistics: Linguistic Views from Plato to Chomsky

An account of man's discovery of language and languages and of his attitudes towards them. The course will cover such topics as Greek and Roman views of language; the development of historical and comparative linguistics in the Nineteenth Century; new developments in the Twentieth Century by scholars such as Firth, deSaussure, Sapir, Bloomfield, Chomsky. The course will also deal with writing systems, especially Semitic, Greek, Roman.

Texts: Pedersen, Discovery of Language; Dinneen, General Linguistics. (Not offered 1976-77.)

## LING 380. (3) Experimental Phonetics

The study of the acoustic and detailed articulatory properties of speech sounds. Introduction to such instruments as the Sound Spectrograph and Electronic Vocal Analog.

This is primarily an experimental laboratory course and the final grade is based on written reports of experiments.

Prerequisite: Linguistics 250.

Texts: To be announced.

H. J. Warkentyne. (2-1;1-2)

## LING 390 (English 390). (3) The Growth and Structure of Modern English

A descriptive approach to the structure of Modern English, designed especially for those students who are interested in the application of modern linguistic science, particularly structural and transformational theory, to an understanding of the language. Topics covered will include the following: social and regional dialects and their significance; theories of grammatical analysis; causes of linguistic change; the history of the English language from its beginnings to the present day, including Canadian English.

This course is divided into 3 sections. Section 1 is for those students who have had previous courses in Linguistics. Sections 2 and 3 are for those students who have had no previous courses in Linguistics.

Texts: List available from the Department or the Education Advising Centre.

J. F. Kess (Section 01) and members of the Department (Sections 02 and 03).

## LING 392. (3) Canadian English

A description of the distinctive features of modern Canadian English, especially in vocabulary, grammar and pronunciation, and an account of the economic, social, and political factors that have given rise to those

Prerequisite: Permission of the instructor.

(Not offered 1976-77.) (3-0; 3-0)

## LING 400. (3) Field Methods and Techniques in Language Analysis

Field methods and techniques in language analysis, using informants or recordings or both. The Department is particularly interested in American Indian and Eskimo languages.

Prerequisites: Lingustics 250 and 340.

The final grade is based on class participation and papers.

Text: To be announced.

T. E. Hukari. (3-0; 3-0)

## LING 420. (3) Historical and Comparative Linguistics

The historical and comparative method in the study of languages, especially Indo-European.

Prerequisite: Linguistics 100 or 360 or equivalent.

T. E. Hukari. (3-0; 3-0)

## LING 426 (French 426). (3) Comparative Stylistics of French and English

A contrastive study of the semantic and stylistic resources of French and English at the structural and cultural levels.

Prerequisite: French 302.

(Not offered 1976-77; will be offered 1977-78.) (3-0;3-0)

#### LING 430. (3) Dialectology

The study of regional and social dialects with emphasis on Canada. Principles of lexicography.

Four or five substantial assignments are the basis of the final grade.

Prerequisite: Linguistics 100 or 360 or permission of the Department.

Texts: Readings in American Dialectology by Allen & Underwood. H. I. Warkentyne. (3-0:3-0)

## LING 448. (1 1/2) Directed Reading in Linguistics

Members of the Department. September-December only. (3-0)

#### LING 449. (11/2) Directed Reading in Linguistics

Members of the Department. January-April only. (3-0)

#### LING 450 (formerly 350). (1 1/2) Seminar in Languages

An elementary analysis of a language. First term: To be selected.

Prerequisite: Permission of the instructor.

Texts: To be announced.

B. F. Carlson.

September-December only. (3-0)

## LING 451 (formerly 350). (11/2) Seminar in Languages

An elementary analysis of a language. Second term: To be selected.

Prerequisite: Permission of the instructor.

B. F. Carlson. January-April only. (3-0)

## LING 481. (1 1/2) Introduction to Computer Linguistics

Principles of computer analysis and synthesis of language data. The design and use of automatic dictionaries. Exercises in mechanical transla-

(Offered in alternate years.)

Prerequisites: Permission of the instructor and Mathematics 170 or equivalent.

(Not offered 1976-77.)

January-April only. (3-0)

#### LING 499. (3) Honours Essay

An essay required of honours students in the fourth year.

## **GRADUATE COURSES**

Students should consult the Department concerning courses offered in any particular year.

LING 501. (11/2-3) Seminar in Canadian English

## LING 502. (1 1/2) Seminar in Linguistic Theories

An introduction to the principles and methodological techniques of linguistic theories of language analysis other than the generative-transformational approach. (3-0:3-0)

#### LING 503. (1 1/2) Seminar in Grammatical Theory

Recent developments in semantic/syntactic theory.

(3-0; 3-0)

#### LING 504. (3) Seminar in Machine Translation

## LING 505. (1 1/2) Seminar in Phonological Theory

Recent developments in phonological analysis; particular emphasis will be placed on phonological universals. (3-0-0)

## LING 506. (1 1/2) Seminar in Lexicography

An introduction to the theory of lexicography and to the practice of dictionary-making, monolingual, bilingual, and automatic.

## LING 513. (11/2) Problems in Grammatical Analysis

Special studies selected on an individual basis to allow a student to pursue a particular topic in grammatical analysis. (3-0-0)

#### LING 515. (11/2) Problems in Phonological Analysis

Special studies selected on an individual basis to allow a student to pursue a particular topic in phonological analysis.

## LING 517. (11/2-3) Experimental Phonetics Laboratory

Special topics in the synthesis and analysis of speech. Sound spectograph, electronic vocal analogue, and other sound equipment will be used for experiment. (0-2-1)

## LING 520. (1 1/2) North American Indian Languages

A survey of the language families of North America and a detailed grammatical examination of several languages chosen from different families. (3-0-0)

#### LING 521. (1 1/2) Austronesian Linguistics

A survey of the languages of the Austronesian language family, taking into account their genetic and typological relationships. Detailed attention will be given to a description of at least one member language of the family. (3-0-0)

#### LING 522. (1 1/2) Far Eastern Linguistics

A survey of the Japanese, Chinese, and Korean languages. One of these languages will receive a detailed description. (3-0-0)

## LING 523. (1 1/2) Australian Linguistics

An outline of the history of research on the Australian aboriginal languages, with emphasis on comparative Pama-Nyungan.

#### LING 524. (1 1/2) Romance Linguistics

Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features. (3-0-0)

#### LING 570. (1 1/2-3) Psycholinguistics

This course is offered in collaboration with the Department of Psychology. It covers such varied topics in the psychology of language as language acquisition, bilingualism, language and thought, the problem of meaning, and the pathology of linguistic behaviour. Alternates with Ling. 370.

Prerequisites: Permission of both departments. (3-0-0)

## LING 580. (1 1/2-3) Linguistics Seminar

The contents of this course will vary.

May be repeated for credit.

(3-0-0)

## LING 599. (Credit to be determined) Thesis

LING 699. (Credit to be determined) Ph.D. Dissertation

## DEPARTMENT OF MATHEMATICS

- William R. Gordon, B.A., M.A. (Brit. Col.), Ph.D. (Calif., Santa Barbara), Associate Professor and Head of the Department.
- Joel L. Brenner, B.A., M.A., Ph.D. (Harvard), Visiting Professor (1975-76).
- Sudhish Ghurye, B.Sc., M.Sc. (Bombay), Ph.D. (N. Carolina), Visiting Professor (January-April, 1976).
- Stephen A. Jennings, B.A., M.A., Ph.D. (Tor.), Professor.
- Shmuel Kaniel, M.Sc., Ph.D. (Jerusalem), Visiting Scientist (1975-76).
- Robert E. Odeh, M.S., Ph.D. (Carnegie Inst. of Tech.), Professor.
- Marvin Shinbrot, B.A., M.A. (Syracuse), Ph.D. (Stanford), Professor.
- Hari M. Srivastava, B.Sc., M.Sc. (Allahabad), Ph.D. (Jodhpur), F.R.A.S. (London), F.N.A.Sc. (India), Professor.
- Ian Barrodale, B.Sc. (Wales), M.A. (Brit. Col), Ph.D. (Liverpool), Associate Professor.
- Leon Bowden, B.Sc. (London), B.Litt. (Oxon.), Ph.D. (London), Associate Professor.

- Stanley R. Clark, B.A.Sc. (Brit. Col), M.Sc. (Aberdeen), Ph.D. (Manchester), Associate Professor.
- Ernest J. Cockayne, M.A. (Oxon.), M.Sc. (McGill), Ph.D. (Brit. Col.), Associate Professor.
- Roger R. Davidson, B.Sc. (Queen's), M.A. (Tor.), Ph.D. (Florida State), Associate Professor. (On study leave 1976-77.)
- Fernand E. Deloume, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (U.S.C.), Associate Professor.
- Byron L. Ehle, A.B. (Whitman), M.S. (Stanford), Ph.D. (Waterloo), Associate Professor.
- Denis Hanson, B.Sc., M.Sc., Ph.D. (Alta.), Visiting Associate Professor (1975-76).
- W. Keith Hastings, B.A., M.A., Ph.D. (Tor.), Associate Professor.
- Stephen T. Hedetniemi, B.S., M.S., Ph.D. (Mich.), Visiting Associate Professor (1975-76).
- Lowell A. Hinrichs, M.A., Ph.D. (Ore.), Associate Professor.
- Albert E. Hurd, B.A., M.A. (Tor.), Ph.D. (Stanford), Associate Professor.
- D. Elizabeth Kennedy, B.A., M.A. (Brit. Col.), Associate Professor.
- Walter P. Kotorynski, B.A. (West. Ont.), M.A., Ph.D. (Tor.), Associate Professor.
- David J. Leeming, B.Sc. (Brit. Col.-Vic. Coll.), M.A. (Ore.), Ph.D. (Alta.), Associate Professor.
- Robert A. MacLeod, B.Sc. (Alta.), M.S. (Cal. Tech.), Ph.D. (Alta.), Associate Profesor.
- Charles R. Miers, B.A. (Knox Coll.), M.A., Ph.D. (Calif., Los Angeles), Associate Professor. (On study leave 1976-77.)
- Gary G. Miller, M.Sc., Ph.D. (Missouri), Associate Professor.
- O. Phoebe Noble, B.A. (Brit. Col.), Associate Professor. (On leave of absence 1976-77.)
- James Riddell, M.Sc., Ph.D. (Alta.), Associate Professor.
- Frank D. K. Roberts, M.A. (Cantab.), M.Sc., Ph.D. (Liverpool), Associate
- Earl D. Rogak, B.Ch.E. (Cooper Union), M.S.E., Ph.D. (Mich.), Associate Professor.
- Pauline van den Driessche, B.Sc., M.Sc. (Imp. Coll.), D.I.C., Ph.D. (Wales), Associate Professor.
- Arne P. Baartz, M.A., Ph.D. (Ore.), Assistant Professor.
- William S. Bowie, B.Sc., M.Sc. (Glasgow), Ph.D. (Waterloo), Assistant Professor.
- Jean W. Butler, B.A. (New York), M.A. (Calif.), Ph.D. (Wash.), Visiting Assistant Professor (Jan. 1975-June 1976.)
- Denton E. Hewgill, B.Sc., Ph.D. (Brit. Col.), Assistant Professor.
- Bruce R. Johnson, B.S., M.A. (Ore. St.), Ph.D. (Ore.), Assistant Pro-
- Donald J. Miller, B.Sc., Ph.D. (McMaster), Assistant Professor.
- Charles E. Murley, B.A. (Colorado), M.S., Ph.D. (Wash.), Assistant Professor. (On study leave 1976-77.)
- D. Dale Olesky, B.Sc., M.Sc. (Alta.), Ph.D. (Tor.), Assistant Professor.
- William E. Pfaffenberger, M.A., Ph.D. (Ore.), Assistant Professor.
- H. Paul Smith, B.A., M.Ed. (Brit. Col.), M.A. (Wash.), Assistant Professor.
- Ying Tun Chen, B.S. (Taiwan), M.S. (Tor.), Ph.D. (Waterloo), Parttime Sessional Lecturer (Jan.-April 1976).
- M. Elizabeth Watton, B.Sc., M.Sc. (McMaster), Sessional Lecturer (1975-76).
- Robert J. Taylor, B.Sc. (Leth.), M.Sc. (U. of Vic.), Senior Laboratory Instructor.

## **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and M.Sc. degrees, see page 150; for graduate courses, see page 84.

#### GENERAL, MAJOR AND HONOURS PROGRAMMES

For either a B.A. or B.Sc. degree in Mathematics, students may take a General, Major or Honours Mathematics programme. The Mathematics course requirements for each programme are as follows:

#### General

- (a) Mathematics 130 (or 100 and 101)
- (b) Mathematics 232 (or 110 and 210)
- (c) Mathematics 230 (or 200 and 201)
- (d) 9 additional units of Mathematics courses numbered 300 or higher.

#### Major

- (a) Mathematics 130 (or 100 and 101)
- (b) Mathematics 232 (or 110 and 210)
- (c) Mathematics 230 (or 200 and 201)
- (d) Mathematics 330 and 333 (or 332)
- (e) 9 additional units of Mathematics courses numbered 300 or higher (of which at least 3 units are numbered 400 or higher) chosen in consultation with the department.

#### Major with Computing Science Emphasis

- (a) Mathematics 130 (or 100 and 101)
- (b) Mathematics 232 (or 110 and 210)
- (c) Computing Science 170 and 171
- (d) Mathematics 230 (or 200 and 201)
- (e) Computing Science 272 and 273 (or Mathematics 271 and Computing Science 272)
- (f) Mathematics 330 and 333 (or 332)
- (g) Computing Science 349
- (h) 6 units chosen from Computing Science 370, 371, 373, 471, 472, 473, 474, 448, 449, of which at least 3 units are numbered 400 or higher.

#### Major with Probability and Statistics Emphasis

- (a) Mathematics 130 (or 100 and 101)
- (b) Mathematics 232 (or 110 and 210)
- (c) Computing Science 170 and 171
- (d) Mathematics 230 (or 200 and 201)
- (e) Statistics 253
- (f) Mathematics 330 and 333 (or 332)
- (g) Mathematics 350
- (h) 6 additional units chosen from Statistics 353, 354, 450, 451, 453, 454

#### Honours

Students who wish to be admitted to an Honours programme in the Department should apply in writing to the Head of the Department on completion of their second year. Normally a student will be admitted to the third year of an Honours programme in the Department only if the student has achieved a first class average in the second year courses taken in the Department. A student graduating in the Honours programme will be recommended for a First Class Degree if the student has achieved a First Class Graduating Average and a First Class average in courses numbered 300 or higher in the Department.

## The Honours Programmes are as follows:

- (a) Mathematics 130 (or 100 and 101)
- (b) Mathematics 232 (or 110 and 210)
- (c) Mathematics 230 (or 200 and 201)
- (d) Mathematics 333, 334, 336, 338
- (e) Completion of one of the following emphases:
  - (i) Pure Mathematics
    - (a) 15 units from 309, 367, 433, 435, 445, 460, 465, 466, 349, 350, chosen in consultation with the Department and of which at least 9 units are numbered 400 or higher. (Normally a student would take Math 433, 435, 445 and 465 as part of this requirement.)

NOTE: Honours students in Pure Mathematics are encouraged to take at least 3 units of statistics courses and at least 3 units of computing science courses.

## (ii) Applied Mathematics

- (a) 15 units of courses offered by the Department chosen in consultation with the Department.
  - NOTE: Honours students in Applied Mathematics are encouraged to take at least three units of statistics courses and at least three units of computing science courses.

- (iii) Probability and Statistics
  - (a) Statistics 253, Computing Science 170, 171.
  - (b) Mathematics 350
  - (c) 6 additional units chosen from Statistics 353, 354, 450, 451, 453, 454.
  - (d) 6 additional units of courses offered by the Department chosen in consultation with the Department.

#### (iv) Computing Science

- (a) Computing Science 170, 171, 272, 273 (or Mathematics 271 and Computing Science 272), 349, 449 and Mathematics 325.
- (b) 6 additional units from Computing Science 370, 371, 373, 471, 472, 473, 474, 448 of which at least 3 units are numbered 400 or higher.
- (c) 1½ additional units of courses offered by the Department chosen in consultation with the Department.
- (v) Department approved option
  - (a) fifteen units of courses offered by the Department numbered 300 or higher chosen in consultation with the Department. At least 9 of the 15 units must be chosen from courses numbered 400 or higher.

By taking Mathematics 130, 230, 232, Statistics 253, Computing Science 170, 171, 272, 273 in the first two years a student would maintain most options until the third year.

## Honours in Physics and Applied Mathematics Programme

This programme will normally comprise a minimum of 66 units of work:

I.	Physics 101 or 121	Elementary Physics Mechanics
	Mathematics 130	Calculus I and II
	[Mathematics 232]	Introductory Linear Algebra
	Chemistry 120	General Chemistry
	or 124	Introductory Physical and Inorganic Chemistry— Part I
II.	Physics 211	Mechanics
	or 213	Optics, Wave Motion, Heat and Elementary Thermodynamics
	Physics 212	Electricity and Magnetism, Electronics, and Modern Physics
	Mathematics 230	Calculus III and IV
	[Mathematics 333]	Algebra I
III.	Physics 321	Classical Mechanics
	Physics 322	Electricity and Magnetism
	Physics 413	Introductory Modern Physics
	Mathematics 325†	Differential equations — ordinary
	Mathematics 326†	Partial differential equations
	Mathematics 334†	Foundations of Analysis
	Mathematics 336†	Real Analysis I
	Mathematics — †	(elective)
	Mathematics 338†	Complex Analysis I
IV.	[Physics 313]	Optics, Wave Motion, Heat and Thermodynamics
	Physics 422†	Electromagnetic theory
	Physics 421†	Statistical Mechanics
	Physics 423†	Introductory Quantum Mechanics
	Physics 420†	Topics in Mathematical Physics II
	Physics 460	Seminar (non-credit)
	Physics electives	
	Mathematics 445	Modern Methods in differential equations

Mathematics 232 may be deferred to the second year, Mathematics 333 must then be deferred to the third or fourth year. Physics 313 or its equivalent must be taken in the fourth year if credit has not been obtained for Physics 213 in the second year. The physics electives are to be chosen in consultation with the Physics Department and the Mathematics electives are to be chosen in consultation with the Mathematics Department.

#### NOTES

 All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.

## † 11/2 units

Mathematics electives

- (2) Any student who demonstrates to the Department that he has mastered the material of a course may be granted advanced placement.
- (3) Students from outside British Columbia, transfer students from Community Colleges and students who have obtained credit for Grade 13 Mathematics must consult the Department before enrolling in any Mathematics course.

## **UNDERGRADUATE COURSES**

#### **MATHEMATICS**

Unless indicated otherwise, courses begin in September and end in April.

#### MATH 012. (no credit) Pre-Calculus Mathematics

The essentials of Mathematics 12 which are prerequisite to Mathematics 100, 102, 110. Topics covered include: set language, algebra of polynomials, relations, functions and their graphs, conics, trigonometry, plane analytic September-December only. (3-0)

## MATH 100. (11/2) Calculus: I

The derivative; the study of elementary functions, including polynomials, exponential, logarithmic and trigonometric functions; the mean value theorem; applications of differentiation.

Prerequisite: Mathematics 12 or its equivalent.

Not open to students who have credit in Mathematics 102 or 180.

January-April only. (3-0)

#### MATH 101. (11/2) Calculus: II

The definite integral; techniques of integration; applications of integration; infinite series; Taylor's formula.

Prerequisite: Mathematics 100 or its equivalent.

September-December only.

#### MATH 102 (formerly one-half of 140). (11/2) Calculus for Students in the Social and Biological Sciences

Calculus of one variable with applications to the social and biological sciences. Exponential growth.

Prerequisite: Mathematics 12 or its equivalent.

Not open to students who have credit in Mathematics 100 or 180.

September-December. Also January-April. (3-0)

#### MATH 110. (11/2) Theory of Equations

Proofs by induction. Real and complex numbers. Polynomial equations. Systems of linear equations. Matrices.

Prerequisite: Mathematics 12 or its equivalent.

September-December. Also January-April. (3-0)

## MATH 130. (3) Calculus: I and II

Same as Mathematics 100 (first term) and Mathematics 101 (second term).

Prerequisite: Mathematics 12 or its equivalent. (3-0; 3-0)

## MATH 151 (formerly one-half of 140). (11/2) Finite Mathematics

Elementary combinatorics; introduction to probability, matrix algebra, systems of linear equations.

Prerequisite: Mathematics 12 or its equivalent or Mathematics 012 (which may be taken concurrently during the fall term.)

NOTE 1: Students who have credit for any of Statistics 253, 343, Mathematics 350 or Statistics 443 may not register in Mathematics 151 for credit.

NOTE 2: The sequences Mathematics 151 and 102 is intended primarily for students in the social and biological sciences; an alternate selection is Mathematics 151 and 130.

September-December. Also January-April. (3-0)

## MATH 160. (3) Fundamental Aspects of Mathematics for the Elementary Teacher

For credit only in the Faculty of Education. A student who has obtained credit for any university mathematics course will normally not be permitted to register for credit in Mathematics 160.

Prerequisite: Mathematics 11 or consent of Department. (3-0; 3-0)

#### MATH 180 (formerly 150). (3) General Mathematics

An intuitive introduction to calculus, elementary matrix algebra and probability.

Prerequisite: Mathematics 11 or Mathematics 91 or equivalent.

Not open to students who have completed Mathematics 12 or 100 or 102.

#### MATH 200. (11/2) Calculus: III

Differentiation of vectors, functions of several variables, chain rule and gradient, potential functions and curve integrals, higher order partial derivatives and applications, introduction to differential equations.

Prerequisite: A grade of C or higher in Mathematics 130.

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course. January-April only. (3-0)

## MATH 201. (1 1/2) Calculus: IV

Functions of several variables, multiple integrals, Green's theorem, Fourier series. Introduction to analysis including proofs of some theorems assumed in earlier work.

Prerequisite: Mathematics 200.

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course. September-December only. (3-0)

#### MATH 210. (11/2) Introductory Matrix Theory

Determinants. Inverse of a matrix. Quadratic forms and the diagonalization of symmetric matrices. Eigenvalues and eigenvectors.

Prerequisite: Mathematics 110.

NOTE: This course is open to first year students who have taken Mathematics 110 in the first term. January-April only.

#### MATH 230. (3) Calculus: III and IV

Same as Mathematics 200 (first term) and Mathematics 201 (second

Prerequisite: A grade of C or higher in Mathematics 130 (or 101).

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course. (3-0; 3-0)

## MATH 231. (3) Second Year Calculus

Calculus of functions of several variables including gradient, directional derivative and divergence. Maxima and minima including problems with one constraint. Simple theory of envelopes. Multiple integrals using rectangular, cylindrical and spherical geometry. Application of multiple integrals to problems in the physical sciences. Introduction to differential equations of first order and differential equations of first and second order with constant coefficients with applications to problems in physics. Fourier series and basic theory of functions of a complex variable.

Prerequisite: Mathematics 130 (or 101).

NOTE 1: This course may not in general be included as part of the Mathematics department's requirement for the Major or Honours programme.

NOTE 2: Students with credit for Mathematics 230 (200 or 201) or Mathematics 240 will not get credit for this course. (3-0; 3-0)

## MATH 232. (3) Introductory Linear Algebra

Same as Mathematics 110 (first term) and Mathematics 210 (second term). (3-0; 3-0)

## MATH 240. (3) Mathematics for Students in the Social and Biological Sciences

Techniques of integration; multivariable calculus; optimization; difference and differential equations with applications; linear programming; further topics in probability and linear algebra.

Prerequisite: Mathematics 151 and Mathematics 102 or Mathematics 151 and Mathematics 100.

NOTE 1: Students who have obtained credit for Mathematics 130 (or 100 and 101) may enrol for Mathematics 240 provided they enrol for Mathematics 151 concurrently.

NOTE 2: Students with credit for Mathematics 230 (200 or 201) or Mathematics 231 will not get credit for this course.

Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.

#### MATH 300T. (3) Calculus for Science Teachers

Vectors, curves and tangents to curves; partial differentiation, chain rule, directional derivative with applications; multiple integration, line surface and volume integrals, potential functions, applications to physical problems, Fourier series expansions; differential equations of first and second order with constant coefficients.

This course is intended for those students planning to take Physics 340T and 440T and is for credit only in the M.Ed. (Science) programme.

Prerequisite: Math 130 or its equivalent (students are advised to review introductory calculus before taking the course). Summer Session only

#### MATH 309. (11/2) Inroduction to Manifolds

Functions on  $E_{\Pi}$ , differentiation, integration, integration on chains, integration on manifolds, selected topics. Not open to students who have credit for Mathematics 331.

Prerequisites: Mathematics 230 and 232.

(May not be offered in 1977-78.) September-December only. (3-0)

## MATH 323. (3) Differential Equations and their Applications to the Physical

Special methods for first order differential equations, linear differential equations of first and higher orders with constant coefficients. Selected second order differential equations with variable coefficients with special attention to Bessel's and Legendre's equations. Systems of linear differential equations, Laplace transforms, numerical methods, boundary value problems including orthogonal functions and Fourier series. Partial differential equations and their applications to problems in physics.

Primarily for students in the Physical Sciences.

Prerequisites: Mathematics 231 or Mathematics 230 and 232.

NOTE: This course may not in general be included as part of the Mathematics Department's requirements for the Major or Honours degrees.

## MATH 325 (formerly half of 345). (1 1/2) Ordinary Differential Equations

First order equations: methods of solution, geometrical interpretation, singular solutions. Numerical methods, higher order linear equations, linear systems. Series solutions, Bessel's equation, the Legendre equation, etc.

Prerequisites: Mathematics 230 and 232 (or 201 and 210)

September-December only. (3-0)

## MATH 326 (formerly half of 345). (1 $\frac{1}{2}$ ) Partial Differential Equations

Derivation of some of the fundamental equations of mathematical physics. Classification of second order equations; well posed problems. Fourier series and separation of variables. Initial value, boundary value, and initial boundary value problems.

Prerequisite: Mathematics 325.

January-April only. (3-0)

## MATH 330. (3) Advanced Calculus

Convergence and uniform convergence in Rn with applications to series and Fourier series. Basic geometry of curves. Green's, Stokes', and the divergence theorems for vector fields. Introduction to complex analysis, including integration and residue theory.

Prerequisites: Mathematics 230 or 201 or 231.

(3-0; 3-0)

## MATH 332. (3) Survey of Modern Algebra

Axiomatic approach to number systems. General algebraic structures. Introduction to the theory of groups, rings, fields and integral domains.

Prerequisite: Mathematics 232 (or 210).

(Not offered 1976-77.)

(3-0:3-0)

#### MATH 333. (3) Algebra: I

Introduction to the theory of groups, rings, fields and integral domains. General algebraic structures. Honours students registered in this course will be required to complete special assignments.

Prerequisite: Mathematics 232 (or 210)

(3-0;3-0)

#### MATH 334. (11/2) Foundations of Analysis

Sets and functions, the real number system, set equivalence, sequences and series, introduction to point set and metric topology, limits and continuity in metric spaces.

Primarily for honours students. Not open to students who have credit

for Mathematics 335 or 430.

Prerequisite: Mathematics 230 and 232 and the consent of the Department. September-December only. (3-0)

#### MATH 336. (11/2) Real Analysis: I

Lebesgue measure and integration, differentiation, Fourier series, Riemann-Stieltjes integration.

Primarily for Honours students. Not open to students who have credit for Mathematics 335.

Prerequisite: Mathematics 334.

January-April only. (3-0)

#### MATH 338. (11/2) Complex Analysis: I

Elementary functions of a complex variable, analytic functions, differentiation and integration of functions of a complex variable, power series and residue theory.

Primarily for honours students. Not open to students who have credit for

Prerequisite: Mathematics 334.

January-April only. (3-0)

#### MATH 350 (formerly 340). (3) Probablity Theory

Basic properties of probability as a function defined on sets; combinatorial analysis; random variables and expectation; conditional probability and independence; special discrete and continuous distributions; sums of random variables; generating functions; limit theorems. Stochastic processes: random walks, recurrent events, Markov chains, Poisson process, birth and death processes. This is a basic course for anyone interested in mathematical or applied statistics, computer simulation or actuarial science. Not open to students who have credit for Mathematics 340.

Prerequisite: Mathematics 230 or 231 or 240. (3-0;3-0)

#### MATH 362. (11/2) Elementary Number Theory

A brief introduction to divisibility, primes, congruences, arithmetic functions, primitive roots, quadratic residues, partitions and geometry of numbers.

For Mathematics majors in Arts and Science or Mathematics majors in Secondary Education. Not open to students who have credit for Mathematics 339 or 460.

Prerequisite: Any 200-level calculus or algebra course.

September-December only. (3-0)

#### MATH 366. (11/2) Geometry

Topics from polyhedral, Euclidean, projective and non-Euclidean geometries. Students should consult the Department regarding topics to be offered in any year. Students proposing to teach mathematics in secondary school are urged to take this course. Not open to students who have credit

Prerequisite: Any second year Mathematics course or permission of the Instructor. January-April only. (3-0)

#### MATH 367. (11/2) Introduction to Differential Geometry

Theory of curves, surfaces, first fundamental form, tensor calculus, Gaussian and mean curvature, geodesic curvature, mappings.

Prerequisites: Mathematics 230 and 232.

(May not be offered in 1977-78.) September-December only. (3-0)

Note: Admission to the following courses is by permission of the Instructor or of the Department.

## MATH 430. (11/2) Topics in Real Analysis

A selection from the following topics: Cauchy or Dedekind construction of the real numbers; cardinality of integers, rationals and reals (types of infinites), open and closed sets; Heine-Borel and Bolzano-Weierstrass theorems; basic theorems from calculus. (Not open to students who have credit for Mathematics 335 or Mathematics 334.)

Primarily for students in Secondary Education or those taking a Major

in Mathematics.

Prerequisite: Mathematics 330 or 332 or Honours equivalent or consent of the Department. September-December only. (3-0)

#### MATH 431. (11/2) Topics in Complex Analysis

A continuation of the complex analysis begun in Mathematics 330. (Not open to students with credit for Mathematics 338 or 441).

Primarily for students taking a Major in mathematics.

Prerequisite: Mathematics 330 or Honours equivalent.

January-April only. (3-0)

#### MATH 433. (3) Algebra: II

Further topics in Algebra. Primarily for Honours students.

Prerequisite: Mathematics 333. (3-0; 3-0)

## MATH 435. (1 1/2) Real Analysis: II

Lebesgue measure and integration. The Lp spaces. Introduction to Hilbert and Banach spaces.

Primarily for Honours students.

Prerequisites: Mathematics 334 and 336 or the consent of the Depart-September-December only. (3-0)

#### MATH 445. (3) Differential Equations

Special solutions, existence, uniqueness, continuous dependence. Series solutions, examples and convergence. The Sturm-Liouville theory, Fourier series, convergence and completeness. The Cauchy-Kowalewsky theorem. Geometric theory of first order partial differential equations. Methods of solution. Elliptic, parabolic, and hyperbolic equations and well-posed problems.

Prerequisites: Mathematics 334 and 336, or the consent of the Depart-

#### MATH 460 (formerly 339). (3) Number Theory

Congruences, numerical functions, elementary theory of primes, quadratic residues. Further topics to be selected from partitions, compositions, distribution of primes, geometry of numbers, rational approximations.

Prerequisite: Mathematics 332 or 333 or B- or higher in Mathematics 232 (or 210). (3-0; 3-0)

(May not be offered in 1977-78.)

(3-0;3-0)

## MATH 465 (formerly 411). (1 1/2) Introduction to Topology

Basic concepts of point set topology.

Prerequisite: Mathematics 334 (which may be taken concurrently) or Mathematics 330 or the consent of the Department.

January-April only. (3-0)

#### MATH 466. (3) Symmetry Geometry

An introduction to the geometry of the classical Euclidean, affine, and projective space. The geometry is studied in terms of the group structure of the symmetries on these spaces. It contains a deeper and more mathematically sophisticated treatment of the topics in Mathematics 366, and in particular the polyhedral and crystal groups. This course will not be offered in 1976-77.

Prerequisites: Mathematics 366 and permission of the Department; or Mathematics 333 (or Mathematics 332) (which may be taken concur-

(Not offered 1976-77.)

(3-0; 3-0)

## MATH 490 (formerly 470). (1 $\frac{1}{2}$ or 3) Directed Studies in Mathematics

Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Head of the Department.

#### MATH 491A. (11/2) Topics in Mathematics

Entry to this course will normally be restricted to Honours students and Major students with first class standing. Information on the topics available in any given year will be available from the Head of the Department whose permission will be required for entry to the course. This course may be taken more than once in different topics with permission of the Head of the Department. The course may not be offered every year.

September-December. Also January-April. (3-0)

#### MATH 491B. (1 1/2) Topics in Mathematics

Entry to this course will normally be restricted to Honours students and Major students with first class standing. Information on the topics available in any given year will be available from the Head of the Department whose permission will be required for entry to the course. This course may be taken more than once in different topics with permission of the Head of the Department. The course may not be offered every year.

September-December. Also January-April. (3-0)

## COMPUTING SCIENCE

#### C SC 170 (formerly MATH 170). (1 1/2) Introduction to Computing

This basic course is intended to teach the student FORTRAN programming, and it also provides a brief introduction to Computing Science. It should be of interest to students from all disciplines. In the laboratory the student will write programmes for the IBM 370/145.

Prerequisite: Mathematics 12 or its equivalent.

Students intending to take a Major or Honours in Mathematics with a computing science option should take Computing Science 170 in the first September-December. Also January-April. (2-2) term.

#### C SC 171 (formerly MATH 171). (11/2) Computer Applications

This course provides an introduction to practical applications of computers in science, engineering, and business. A student should gain considerable insight into what computers can do in these areas, and, in addition, he will develop programming skills in the laboratory.

Prerequisite: Computing Science 170. January-April only. (2-2)

#### C SC 272 (formerly MATH 272). (1 $\frac{1}{2}$ ) Computers and Programming

This course is designed to introduce the student to basic computer organization, machine language programming, and the use of assembly language programming systems. The concepts being taught are illustrated by using the IBM 370/145 computer as the example machine, however other systems are also discussed. Students are taught to program in assembler language using the IBM/370 assembler language.

Prerequisite: Computing Science 271 or 171.

September-December only. (3-1)

## C SC 273 (formerly MATH 370). (1 1/2) Programming Languages

This course involves a survey of the significant features of existing programming languages, with particular emphasis on the underlying concepts abstracted from these languages. The relationship between source programmes and their run-time representation during evaluation is considered, but the actual writing of compilers is taught in Computing Science 471. The concepts discussed are illustrated by programming assignments.

Credit cannot be obtained for both Computing Science 273 and 370.

Prerequisite: Computing Science 272. January-April only. (3-1)

#### C SC 349 (formerly MATH 349). (3) Numerical Analysis: I

This full-year course provides an introduction to most of the topics in numerical analysis. The areas covered are error analysis, roots of equations. linear systems of equations, linear programming, matrix algebra, eigenvalue problems, interpolation and extrapolation, numerical integration and differentiation, Monte Carlo methods, numerical solution of ordinary and partial differential equations, approximations to functions and data, function minimization. Brief references are also made to difference equations, boundary value problems, integral equations, nonlinear systems of equations, and nonlinear programming. The laboratory period is used to discuss problems arising from the weekly assignments.

Prerequisites: Computing Science 171 and Mathematics 230 (or 201) and Mathematics 232. (3-1; 3-1)

#### C SC 371 (formerly MATH 371). (11/2) Systems Programming

This course considers in some detail the various problems which must be solved if a computer is to function efficiently and still provide the services required by its various users. The specific hardware features and software programmes which are needed under various operational conditions (batch processing, multiprogramming, time sharing, etc.) are considered. Several projects involving the programming and testing of software components are included in the course.

Prerequisite: Computing Science 273 (or 370).

January-April only. (3-0)

## C SC 373 (formerly MATH 373). (1 1/2) Introduction to Systems Analysis

This one-semester course introduces the student to many of the techniques used in analysing a business data processing system. Topics discussed will include the following: man-machine systems, objectives of data processing systems, data gathering and analysis, documentation, system controls, file processing methods, system implementation, PERT and critical path, hardware selection and system evaluation.

Prerequisite: Computing Science 273 (or 370) or permission of the Instructor.

September-December only. (3-0)

## C SC 448 (formerly MATH 448: 481). (3) Introductions to Operations Research

This two-semester course introduces the student to many of the techniques used in operations research. Both the mathematical theory and the practical application of these methods are discussed. Topics covered are: linear programming, the simplex method, applications of linear programming, duality theory, the revised simplex method, transportation and personnel-assignment algorithm, game theory, network analysis, PERT and critical path, dynamic programming, queueing theory, sampling, simulation and Monte Carlo, inventory theory, nonlinear programming.

(3-0; 3-0)Prerequisite: Computing Science 349.

## C SC 449 (formerly MATH 449). (3) Numerical Analysis: II

This course, which is primarily for Honours students, consists of a thorough discussion of two topics (one topic per semester) selected from: numerical linear algebra, approximation theory, optimization techniques, and the numerical solution of differential equations.

Prerequisites: Computing Science 349 and Mathematics 336 (which may be taken concurrently). (3-0; 3-0)

#### C SC 471 (formerly MATH 471). (1 1/2) Compiler Construction

This course emphasizes the techniques involved in the analysis of source language and the generation of object code. Although some theoretical topics are discussed, the course has the practical objective of teaching students how compilers may be constructed. Programming assignments illustrate different methods of syntax analysis in addition to the translation of a simple source language into a hypothetical machine language.

Prerequisite: Computing Science 273 (or 370).

September-December only. (3-0)

## C SC 472 (formerly MATH 472). (1 1/2) Theoretical Aspects of Computing Science

Grammars of formal languages and their relation to automata; Turing machines, computability, the halting problem; the use of formal grammars as models of programming languages.

NOTE: The programming of algorithms for syntax analysis is done in Computing Science 471.

Prerequisites: Mathematics 332 and Computing Science 273 (or 370).

January-April only. (3-0)

#### C SC 473 (formerly MATH 473: 470). (1 1/2) Topics in Computing Science: I

The topics covered in this one-semester course depend primarily on the interests of the Instructor. For example, the course may comprise one or more of the following topics: graph theory, combinatorics, artificial intelligence, switching theory, automata theory, information retrieval, and numerical analysis.

Prerequisite: Consent of the Instructor. Credit cannot be obtained for both Computing Science 473 and Mathematics 470.

September-December only. (3-0)

#### C SC 474 (formerly MATH 474: 470). (1 ½) Topics in Computing Science: II

The topics covered in this one-semester course depend primarily on the interests of the Instructor. For example, the course may comprise one or more of the following topics: graph theory, combinatorics, artificial intelligence, switching theory, automata theory, information retrieval, and numerical analysis.

Prerequisite: Consent of the instructor. Credit cannot be obtained for both Computing Science 474 and Mathematics 470.

January-April only. (3-0)

### STATISTICS

## STAT 253 (formerly MATH 253: 343). (3) Introduction to Probability and Statistics

This course introduces basic theory of probability and statistics illustrated with diverse realistic applications. Topics include elementary methods of data analysis, elementary probability theory, probability distributions, expectation, sampling distributions, basic principles of statistical inference, least squares, and an introduction to analysis of variance and regression. A knowledge of computer programming is desirable but not necessary. Credit cannot be obtained for both Statistics 253 and Mathematics 343.

Prerequisite: Mathematics 130 or Mathematics 151 and 102.

(3-0; 3-0)

## STAT 353 (formerly MATH 353). (1 1/2) Applied Regression Analysis

An outline of linear regression theory with applications.

Prerequisite: Statistics 253 or Mathematics 343 or permission of the Instructor. September-December only. (3-0)

## STAT 354 (formerly MATH 354). (1 1/2) Sampling Techniques

Principal steps in planning and conducting a sample survey Sampling techniques including stratification, systematic sampling and multi-stage sampling. Practical survey designs with illustrations. Non-sampling errors.

Prerequisite: Statistics 253 or Mathematics 343 or permission of the Instructor.

January-April only. (3-0)

#### STAT 450. (11/2) Theory of Statistical Inference

A study of problems in statistical inference with emphasis on the general decision problem, sufficient statistics, point and interval estimation, hypothesis testing, and normal distribution theory. The development and application of parametric and distribution-free procedures.

Prerequisites: Mathematics 350 (formerly 340) and one of Statistics 253, Mathematics 330, or Mathematics 334, 336.

September-December only. (3-0)

#### STAT 451. (11/2) Topics in Mathematical Statistics

Possible topics include: Nonparametric theory, theory of linear models, and stochastic modelling.

Prerequisite: Statistics 450.

January-April only (3-0)

#### STAT 453. (1 1/2) The Design and Analysis of Experiments

An introduction to the principles of experimental design and the techniques of analysis of variance. A discussion of experimental error, randomization, replication, and local control. Analysis of variance is developed for single-factor and multi-factor experiments. The use of concomitant observations. Multiple comparisons and orthogonal contrasts.

Prerequisites: Statistics 253, 353 or some experience (familiarity) with experimentation. September-December only. (3-0)

## STAT 454. (1 ½) Topics in Applied Statistics

Possible topics include: Multivariate analysis, multi-dimensional scaling methods, clustering methods, and time series analysis.

Prerequisites: Statistics 353 and the consent of the Instructor.

January-April only. (3-0)

#### **GRADUATE COURSES**

#### MATHEMATICS

Students should consult the Department of Mathematics concerning courses offered in any particular year.

MATH 500A. (1 1/2) Topics for Teachers: Directed Studies

MATH 500B. (1  $\frac{1}{2}$ ) Topics for Teachers: Combinatorics and Graph Theory

MATH 500D. (1 ½) Topics for Teachers: Discrete Probability Theory and Applications

Not open to students who have credit for Math 350.

MATH 500E. (1 1/2) Topics for Teachers: Finite Algebraic Systems

MATH 500F. (1 1/2) Topics for Teachers: Heuristics

## MATH 500G. (11/2) Topics for Teachers: Numerical Methods

Not open to students who have credit for Math 349 or Computing Science 349.

Except by permission by the Dean of Graduate Studies, the above courses are open only to students in the M.Ed. (Mathematics) programme.

## MATH 501A (1½) Applied Statistics

An introduction to statistical methodology with particular emphasis on basic statistical principles, criteria for the selection of statistical techniques, application of statistical procedures.

## MATH 501B (1 ½) Numerical Methods: I

Numerical methods using the computer for solving mathematically posed problems which can not be solved conveniently with exact formulas.

## MATH 501C (1 1/2) Simulation

Methods of studying the performance of systems by imitating their behaviour and an examination of the advantages, pitfalls and application of simulation methods.

## MATH 501D (1 ½) Optimization

Methods of maximizing and minimizing a function including linear and non-linear programming, unconstrained optimization, dynamic programming, and a survey of available computer programs.

#### MATH 501E (11/2) Applied Stochastic Processes

An examination of the mathematical structures of processes in which events take place in time or space according to probabilistic laws.

## MATH 501F (11/2) Partial Differential Equations

Specific partial differential equations such as the Laplace, diffusion, and wave equations, are studied as models for a wide range of application in continuum mechanics, fluid mechanics, theory of sound, electrostatics, etc.

#### MATH 501G (11/2) Numerical Methods: II

Further coverage of numerical methods for problem solving with computers.

#### MATH 501H (11/2) Mathematical Models

The formulation, analysis and interpretation of mathematical models of selected scientific topics.

MATH 510. (2-4) Abstract Algebra

MATH 511. (2-4) Topics in Matrix Theory and Linear Algebra

MATH 520. (2-4) Number Theory

MATH 530. (2-4) Analysis

MATH 531. (2-4) Functional Analysis

MATH 540. (2-4) Topology

MATH 550. (2-4) Topics in Applied Mathematics

MATH 551. (2-4) Differential and Integral Equations

MATH 555. (2-4) Topics in Probability

#### MATH 581. (2-4) Directed Studies

Directed studies may be available in the areas of faculty interest, see page 150.

MATH 585. (2-4) Seminar

## MATH 599. (4-6) Master's thesis

The Department of Mathematics offers graduate programmes leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics, Computer Science and Statistics.

#### COMPUTING SCIENCE

CSC 570 (formerly MATH 570). (2-4) Topics in Numerical Analysis

C SC 571 (formerly MATH 571) (2-4) Topics in Computing Science

CSC 572 (formerly MATH 572). (2-4) Topics in Optimization

CSC 573 (formerly MATH 573) (2-4) Advanced Computer Systems

CSC 574 (formerly MATH 574). (2-4) Non-Numerical Computing

CSC 580 (formerly MATH 580). (no credit) Applications of Computers in Research (1½ fee units)

This course provides the introduction to computing that is necessary for some thesis projects. It is not open to students registered in a graduate programme in the Department of Mathematics.

## STATISTICS

STAT 554 (formerly MATH 554) (2-4) Time Series Analysis

STAT 556 (formerly MATH 556) (2-4) Topics in Statistics

STAT 557 (formerly MATH 557) (2-4) Sampling Techniques

STAT 558 (formerly MATH 558) (2-4) Linear and Non-Linear Statistical Models

STAT 561 (formerly MATH 561) (2-4) Decision Theory and Statistical Inference

STAT 562 (formerly MATH 562) (2-4) Distribution-free and Rank-order Statistics

## PACIFIC STUDIES PROGRAMME

Programme Director (1975-76): M. C. R. Edgell, B.A. (Birmingham), Conservation Diploma (London), Ph.D. (Birmingham), Assistant Professor, Geography.

Programme Director (1976-77): to be appointed.

The Interdisciplinary Pacific Studies Programme, approved by the Senate in February 1969, is designed at present to provide a concentration in the area of Pacific studies to be used for both general education and professional purposes. Its initiation stems from Canada's rapidly developing interest in the Pacific area, the location of Victoria in relation to the Pacific and a serious lack of knowledge about the area.

Students interested in the programme should consult the Director, Pacific Studies Programme, as soon as possible after entering the University, so guidance may be given to help in course selection during the first and

second years.

Programme Requirements for a B.A. in Pacific Studies are as follows:

#### **GENERAL**

First and second years: one of the following courses is highly recommended: Chinese 100, 200; French 160, 260, 180, 280, 290; Japanese 100, 200; Russian 100, 200; Spanish 100, 240.

Third and fourth years: Pacific Studies 300 and 6 units chosen from Pacific Studies 400, 401, 490 and six units selected from courses listed below.

#### MAJOR

First and second years: one of the following is highly recommended: Chinese 100, 200; French 160, 260, 180, 280, 290; Japanese 100, 200; Russian 100, 200; Spanish 100, 240.

Third and fourth years:

- 1) 15 units from Pacific Studies 300, 400, 401, 490 including 3 units from courses listed below;
- 2) 9 additional units from courses listed below;
- 6 units of other courses not already completed, which may be chosen from those recommended for first and second years, above.

Course list: Anthropology 324, 326, 327, 328, 329; Biology 310; Chinese 301; Economics 320, 323, 350, 405, 420; English 439; Geography 360, 462, 463, 464, 465, 466, 467; History 252, 330, 374, 409, 413, 434 (formerly 413), 436 (formerly 414); History in Art 331, 430; Linguistics 400, 450, 451; Philosophy 332; Political Science 312, 315, 317, 342, 343, 445.

Further information may be obtained by consulting the Director or the following committee members:

James A. Boutilier, B.A. (Dalhousie), M.A. (McMaster), Ph.D. (London), Part-time Sessional Lecturer (1975-76) Pacific Studies.

Hsin-i Hsiao, B.A. (Tunghai), M.A., Ph.D. (Harvard), Assistant Professor, Slavonic & Oriental Studies.

David C. Lai, B.A., M.A. (Hong Kong), Ph.D. (London), Associate Professor, Geography.

Robert B. Lane, A.B., Ph.D. (Wash.), Associate Professor, Anthropology.

Norman Meller, LL.B. (Calif.-Hastings), A.B. (Calif.-Berkeley), M.A., Ph.D. (Chicago)., Visiting Professor (1975-76).

E. Patricia Tsurumi, B.A. (Brit. Col), A.M., Ph.D. (Harvard), Assistant Professor, History.

Henry J. Warkentyne, B.A. (West. Ont.), M.A., Ph.D. (London), Associate Professor, Linguistics.

Rudolph W. A. Wikkramatileke, B.A. (Ceylon), M.A. (Clark), Ph.D. (London), Professor, Geography.

Yuen-Fong Woon, B.A., M.A. (Hong Kong), Part-time Sessional Lecturer (1975-76) Pacific Studies.

#### **COURSES**

## PACI 300. (3) Themes and Problems of the Pacific

This is an interdisciplinary course for students with an interest in the Pacific area. The course structure will be flexible to allow for lectures, discussions, reports, projects and the use of speakers outside the University

on topics such as the following: trans-Pacific contacts and communications; genetic and typological relationships of language groups in the Far East, Pacific and Australia; inter-cultural contacts; Pacific settlement patterns; land organization and reform; landscape and the artist; industrialization and the emergent society; Asian nationalism; contemporary Chinese thought; and economic disparities in the Pacific. An underlying theme will be Canada's role and her relationship to Pacific problems and development.

#### PACI 400. (3) Seminar in East and Southeast Asian Studies

The seminar will be concerned with a discussion of major issues together with a detailed analysis of problems in East Asia and Southeast Asia. Where appropriate, attention will be paid to Canadian relationships with the area.

Prerequisite: Pacific Studies 300 or permission of Instructor.

#### PACI 401. (3) Seminar in Australasia and Pacific Island Studies

The seminar will be concerned with a discussion of major issues together with a detailed analysis of problems in Australia, New Zealand, and the Pacific Islands. Where appropriate attention will be paid to Canada's relationships with the area.

Prerequisite: Pacific Studies 300 or permission of Instructor. (3-0; 3-0)

#### PACI 490 (formerly 401). (3) Directed Studies

This will normally involve readings and a research project in a particular area of Pacific studies, in which the student is qualified. The individual programme of studies will be supervised by an appropriate faculty member designated by the Pacific Studies Committee.

Prerequisite: Pacific Studies 300.

## DEPARTMENT OF PHILOSOPHY

- Kenneth W. Rankin, M.A., Ph.D. (Edin.), Professor and Chairman of Department.
- Howard J. N. Horsburgh, M.A. (Glasgow), B.Litt. (Oxon.), B.Sc. (Econ.) (London), Professor.
- John Woods, B.A., M.A. (Tor.), Ph.D. (Mich.), Professor and Associate Dean of the Faculty of Arts and Science.
- Charles B. Daniels, A.B. (Chicago), D.Phil. (Oxon.), Associate Professor.
- Eike-Henner Kluge, B.A. (Calgary), A.M., Ph.D. (Mich.), Associate Pro-
- Charles G. Morgan, B.S. (Memphis State), M.S., Ph.D. (Johns Hopkins), M.Sc. (Alta.), Associate Professor and Graduate Advisor.
- Rodger G. Beehler, B.A. (Manitoba), B.Phil. (Oxon.), Ph.D. (Calgary), Assistant Professor.
- Alan R. Drengson, B.A., M.A. (Wash.), Ph.D. (Ore.), Assistant Professor. John M. Michelsen, B.A., M.A., Ph.D. (Wash), Assistant Professor.
- Bryan Campbell, B.Sc., M.A. (Tor.), Sessional Lecturer (1975-77).
- George T. Monticone, B.A. (Wash. St.), Ph.D. (Calgary), Sessional Lecturer (1975-76)
- Karen H. Seubert, B.A., M.A., Ph.D. (Penn. St.), Sessional Lecturer (1975-76).
- Richard L. Simpson, B.A., Ph.D. (Brit. Col.), Part-time Sessional Lecturer (1975-76).

## GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 152; for graduate courses, see page 90.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

General — 9 units in courses in Philosophy numbered 300 or above with all prerequisites satisfied.

- Major 21 units in courses in Philosophy comprising:
- (a) either Introduction to Philosophy (Phil. 100) or History of Philosophy (Phil. 102)

- (b) Argument, Fallacy and Logical Theory (Phil. 202)
- (c) Moral Philosophy (Phil. 302)
- (d) either The Rationalists (Phil. 306) or The Empiricists (Phil. 308)
- (e) 3 additional units from courses numbered 300 or higher
- (f) Plato (Phil. 421) and Aristotle (Phil. 422)
- (g) 3 additional units in courses numbered 400 or higher

N.B. Although not required, students are encouraged to include at least one of the following: Existentialism (Phil. 211), Philosophy of Religion (Phil. 212), Philosophy of Science (Phil. 222), Aesthetics (Phil. 242), and Medieval Philosophy (Phil. 245).

Honours — 31½ units in courses in Philosophy comprising:

- (a) either Introduction to Philosophy (Phil. 100) or History of Philosophy
- (b) Argument, Fallacy and Logical Theory (Phil. 202)
- (c) Moral Philosophy (Phil. 302)
- (d) The Rationalists (Phil. 306)
- (e) The Empiricists (Phil. 308)
- (f) Kant (Phil. 400)
- (g) Inductive Logic and Probabilistic Reasoning (Phil. 401)
- (h) Plato (Phil. 421) and Aristotle (Phil. 422)
- (i) Honours Seminar (Phil. 499)
- (j) 3 additional units selected from Existentialism (Phil. 211), Philosophy of Religion (Phil. 212), Philosophy of Science (Phil. 222), Aesthetics (Phil. 242), Medieval Philosophy (Phil. 245), or from courses numbered 300 or higher.
- (k) 6 additional units in courses numbered 400 or higher

N.B. To obtain a first class honours degree it is required that a student have (1) a graduating average of 6.5 or higher, (2) at least a first class average of 6.5 in all credit courses taken in Philosophy, and (3) at least a 7.0 average in upper division credit courses taken in Philosophy. To obtain a second class honours degree it is required that a student have at least a 3.5 graduating average and have at least a 5.0 average in all credit courses taken in Philosophy.

## **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

NOTE: Courses in the 100 series are broader in scope than those in the 200 series, but neither type should present any difficulty for the beginner. Both types are recommended for students in any programme whether they plan to continue in Philosophy or not, and may be taken in any year: e.g. courses in the 200 series may be taken in the first as well as in later years. Other courses in Philosophy may be taken by satisfying the listed prerequisites or with the permission of the Instructor.

Fuller information on each course will be issued by the Department. This will include the reading required and the name of the Instructor. Students are advised to ask the Department for copies prior to registration.

#### PHIL 100. (3) Introduction to Philosophy

A beginner's investigation of questions which govern attitudes towards life such as: Is the unexamined life worth living? Is happiness the supreme good? Is virtue its own reward? Can the unjust man be happy? Does the individual exist for the good of the state, or the state for the good of the individual? What limits to freedom of thought and action are justifiable? Is what is right and what is wrong 'just a matter of opinion'? Is all our experience an illusion? Does God exist? If so, why did he create evil? Are any of our beliefs certainly true? How can we find out? By logic, observation and experiment, analogical reasoning, intuition, faith, or what?

The course will include a first-hand study of major philosophers, and consequently of some of the more original contributions to our intellectual heritage. But the over-riding concern is to teach the student how to respond in a co-ordinated, controlled, and critical way to the sorts of question which these philosophers have raised or provoked.

NOTE: This is a multi-sectioned course. Typical readings are from such texts as Plato's Republic, Artistotle's Nicomachean Ethics, Descartes' Meditations, Spinoza's Ethics, Berkeley's Three Dialogues Between Hylas and Philonous, Hume's Dialogues Concerning Natural Religion, Nietzsche's Beyond Good and Evil, Mill's Essay on Liberty, Ryle's Dilemmas, and more recent writing. But problems, types of approach, and texts vary from section to section. (3-0; 3-0)

#### PHIL 102. (3) History of Philosophy

This course is intended as an introduction to the history of philosophical thought in the West. The main emphasis, therefore, will lie on a chronological discussion of the philosophies of representative figures, and on tracing lines of development. An attempt will be made to relate the various positions to the social and cultural elements predominating in the societies of the various thinkers.

#### PHIL 202. (3) Argument, Fallacy and Logical Theory

An important aspect of human competence is a capacity for clear thinking, cogent advocacy and telling criticism. In the first part of this course conditions for the success and failure of such undertakings are pursued in an informal way. A review is made of various deficiencies, fallacies and paradoxes of everyday reasoning, and their repair is attempted. Different logical traditions are noted, including the Aristotelian and Indian schools of thought, and relevant differences between Rhetoric, Dialectic and pure Logic are also attended to.

The second half of the course develops an elementary formal theory by which to represent the basic logical structure of natural languages such as English. As the theory unfolds a number of key concepts are investigated, among which are: truth, proof, validity, necessity, contradiction, consistency, meaning, existence, and generalization. Part of the design of the course is to present issues that may prove relevant to an understanding of achievements and problems in other areas of study.

Text: John Woods, Proof and Truth.

## PHIL 207 (Classical Studies 207). (3) Greek Historical and Philosophical Thought

An introductory study of the development of Greek thought from the prescientific, mythical world views to the theories developed in the fourth century B.C. The parallel development of systematic historical and philosophical thought out of the common ground of the earlier myths will be examined, and the effort to develop acceptable models of explanation for human as well as natural events will be seen to be a point common to the two strands of Greek thought. The philosophical emphasis will be on metaphysical and epistemological issues, and the ideas singled out for study will relate to the structure of the cosmos, the nature of man, and man's relationship to the universe. An attempt will be made to understand these ideas, not as isolated, technical doctrines, but as responses to problems arising within a particular cultural context.

Texts: Hesiod Theogony (Penguin); Plato (Mentor, ed. Rouse); Aristotle (Mentor, ed. Bambrough); The Greek Historians (ed. Toynbee); Aristotle, Constitution of Athens (ed. Haffner); others may be announced.

#### PHIL 211. (3) Existentialism

Through an examination of the writings of some main exponents of Existentialism, an effort is made to understand their various answers to the central question: "How can the individual maintain his freedom and dignity in a technological society dedicated to the ideas of comfort, efficiency, and security?" Among topics to be discussed are: the reaction against scientific rationalism; the reality of human freedom and choice; the encounter with Nothingness; the Absurd; the death of God; the significance of the extreme experiences of anguish and despair for the effort to realize an authentic form of existence.

Although the main emphasis is on philosophical writings, the connexion with existential art, literature, theology, and psychoanalysis will also be

Some works studied in recent years are: Kierkegaard, Either/Or, Fear and Trembling; Nietzsche, Thus Spoke Zarathustra, The Antichrist; Sartre, Being and Nothingness (selections), Selected Plays; Camus, The Myth of Sisyphus, The Outsider, Selected Plays; Kafka, The Trial; Laing, The Divided Self.

#### PHIL 212. (3) Philosophy of Religion

There have been many estimates of religion. It has been thought of as a crutch, a gamble, an illusion, a magnificent obsession, and the final answer to man's most momentous questions. Which is it? Or is it something quite different from what it seems? Philosophy has subjected religion to searching scrutiny. This class will consider some of the things that have emerged from the philosophical examination of religion.

Texts: To be announced.

H. J. N. Horsburgh. (3-0; 3-0)

#### PHIL 222 (formerly 221 & 223). (3) Philosophy of Science

This course examines certain of the presuppositions of, and some philosophical questions raised by, the various sciences. A central preoccupation will be the analysis of causal and statistical patterns of explanation and of the logical structure of scientific laws and theories. Some attention is given to the nature of scientific confirmation and to such classical philosophical themes as whether there can be any freedom of the will in a universe governed by scientific laws. The course will also touch upon contemporary scientific understanding of the nature of time, of space, of life and of mind, and of purpose in nature. (Unavailable for credit to students with credit in former Philosophy 221 and Philosophy 223.)

Texts: To be announced.

B. Campbell. (3-0; 3-0)

#### PHIL 232. (11/2) Moral Problems of Contemporary Society

An investigation of certain moral problems which might be called social problems as well. Among the topics to be discussed are war, social protest and civil disobedience, revolution, sexual relations, abortion, suicide, poverty, destruction of the natural environment, fulfillment in work and the quality of life. Differing moral positions concerning these matters will be developed and their justifications sought out and examined.

Texts: To be announced.

C. B. Daniels. January-April only. (3-0)

## PHIL 233. (1 1/2) Philosophy of Education

An inquiry into what can be taught, and the character of certain forms of understanding which cannot be taught. Among the questions to be asked are: What is education and what is its value? What is involved in coming to "see things in a new way"? Is such a transformation what education ought to aim at? How far is it the purpose of education to instruct people? Is education essentially a conservative force in society? Does it corrupt or

Texts: R. Williams, Culture and Society; R. Deardon, P. Hirst, R. Peters, Education and the Development of Reason; R. P. Wolff, The Ideal of a University; E. Herrigel, Zen in the Art of Archery; P. Friere, The Pedagogy of the Oppressed.

R. G. Beehler.

September-December only. (3-0)

## PHIL 238. (3) Philosophy in Literature

The purpose of this course is to acquaint the student with various philosophical theories and themes as these find expression in classical and contemporary literature. In some years the course may be devoted to an examination of a single theme as it emerges in distinct periods and writings. Overall emphasis will be upon the study of philosophy through literature rather than upon philosophy as one aspect of some literary genre, epoch, or masterpiece. Readings may range over the literature of many countries and will not be necessarily confined to works in the Western tradition.

Prerequisite: 3 units of philosophy and 3 units in literature, or permission of the instructor. (3-0; 3-0)

## PHIL 242. (3) Aesthetics

This course is an introductory examination of such basic problems of aesthetics as: What is a work of art? Do works of music differ from each other in much the same way as works in the plastic arts differ from each other? What role, if any, does consideration of emotions and intentions legitimately play in evaluation of a work of art? How does forgery differ from plagiarism? Time will be devoted to the discussion of the problems particular to each major art form, as well as to problems arising from comparison among these art forms.

Texts: Aristotle, Poetics; Tolstoy, What is Art? Hanslick, The Beautiful in Music; Gombrich, Art and Illusion; Goodman, Languages of Art.

C. B. Daniels. (3-0; 3-0)

#### PHIL 245. (3) Medieval Philosophy

The purpose of this course is to give the student some insight into the depth and richness of philosophical, religious and political thought of the middle ages, and to convey to him an appreciation of the complexity and sophistication of medieval intellectual endeavour. Since Western thought was heavily influenced by Islamic philosophies and by mystical speculations, a special section of the course will be devoted to the philosophy of Islam and its impact on the West, and another to an examination of medieval mysticism.

Texts: F. Copleston, A History of Philosophy, Vol. 2 (Pts. I & II) and Vol. 3 (Pt. I).

(Not offered 1976-77.) (3-0; 3-0)

#### PHIL 269. (3) The Self, Communication, and Understanding

In the first term, an introductory philosophical investigation of the assumptions behind contemporary theories of the self as developed in selected works of psychologists, psychiatrists, and sociologists. One central question, in terms of which these varying approaches will be examined, is: upon what does a person's conception of himself depend, and how far is this conception sensitive to the way other persons appreciate or treat him? In the second term contemporary writing on the relation of thought to language and other media will be examined. The central question here will be: what is the relation of the distinctively human forms of life to language, and is there a connection between thought of an age and its prevailing media of expression?

Texts: R. D. Laing: The Divided Self; E. Goffman, The Presentation of Self in Everyday Life; I. Robinson, The Survival of English; M. McLuhan, The Gutenberg Galaxy, Understanding Media; L. Stevenson, Seven Theories of Human Nature.

R. G. Beehler (with the cooperation of members of the Linguistics & Psychology Departments). (3-0; 3-0)

#### PHIL 287 (formerly 332). (3) Eastern Philosophy

The main emphasis in this introductory course is on the major philosophic traditions of the East: Confucian, Taoist, Buddhist and Hindu. Readings from original texts, such as the Analects, The Tao Te Ching, The Upanishads, and others, form the basis for class discussions. An effort is made to compare major teachings of Eastern Philosophers with those of Western Philosophers.

Texts: To be announced.

A. R. Drengson.

(3-0; 3-0)

#### PHIL 302. (3) Moral Philosophy

A study of the theory and practice of the ethical traditions which have had the greatest influence on the contemporary world.

Texts: To be announced.

H. I. N. Horsburgh.

(3-0; 3-0)

Not all the following courses will be offered every year. For fuller information see the Departmental handout issued in the summer.

## PHIL 306. (3) The Rationalists

The main purpose of this course is to afford the student an in-depth study of the so-called "continental rationalists". To this purpose, the positions of representative figures will be examined in some detail and an attempt made to relate them to each other. Full emphasis will be placed on tracing the results to the rationalist's preoccupation with a priori necessary truths and the principle of sufficient reason vis-à-vis their theories of perception and knowledge.

Prerequisite: Philosophy 100 or 102, or permission of the Instructor.

Texts: To be announced.

E.-H. W. Kluge.

(3-0; 3-0)

## PHIL 308. (3) The Empiricists

An intensive study of the major writings of Locke, Berkeley and Hume, with emphasis on their treatment of various epistemological and metaphysical issues. Works covered: Locke's Essay on Human Understanding; Berkeley's Three Dialogues and Principles of Human Knowledge; and Hume's Treatise of Human Nature.

Prerequisite: Philosophy 100 or 102, or permission of the Instructor. (Not offered 1976-77.) (3-0; 3-0)

## PHIL 322. (3) Advanced Philosophy of Science

A study in depth of important issues in the philosophy of science. Topics may include the following: the structure of explanation; confirmation theory; concept formation and theory construction; philosophical problems in the physical, biological and social sciences; methodology; theory of models.

Prerequisite: Philosophy 202 or 222 or permission of the Instructor.

Texts: To be announced.

C. G. Morgan. (3-0; 3-0)

#### PHIL 324. (3) Philosophy of History

Major theories of history such as those of Hegel, Marx, Spengler, Toynbee, and Niebhur will be examined, as well as questions related to the conduct of historical inquiry. In addition, attention will be devoted to contemporary theories of history that attempt to explain the significance and direction of the 20th century.

Prerequisite: Philosophy 100 or 102, or History 234, 236, 240 or 242, or permission of the Instructor.

Texts: To be announced.

A. R. Drengson.

(3-0; 3-0)

## PHIL 325. (1 1/2) Social and Political Philosophy: I — Hobbs and Rousseau

Among the questions to be taken up are: What are human needs? In what kind of society are these needs best provided for? What is the connection of government to these needs and how far can political institutions or political activity provide for the achievement of a good society? How do societies change? On what does social stability depend? What is the connection of religious, moral and economic life to political life? If the history of political life is a history of corruption and illusion what should (This course will alternate with Philosophy 327. Not open to students with credit in Philosophy 326 prior to 1975-76.)

Prerequisite: A previous course in Philosophy, or Political Science 300, or permission of the Instructor.

Texts: T. Hobbes, Leviathan; J. J. Rousseau, Discourse on the Origin of Inequality, The Social Contract; J. Plamenatz, Man and Society; M. Cranston & R. S. Peters (eds.), Hobbes and Rousseau.

R. G. Beehler.

January-April only. (3-0)

## PHIL 327. (1 1/2) Social and Political Philosophy: II - Marx

Questions similar to those raised in Philosophy 325 will be examined by study of the work of Marx. The same questions will be asked, and particular attention will be paid to Marx's teaching concerning human alienation and exploitation. (This course will alternate with Philosophy 325. Not open to students with credit in Philosophy 326 in 1975-76 and prior to 1974-75.)

Prerequisite: A previous course in Philosophy, or Political Science 300 or permission of the instructor.

Texts: T. Bottomore & M. Rubel (eds.) Karl Marx: Selected Writings in Sociology and Social Philosophy; D. McLellan, The Thought of Karl Marx; D. Ollman, Alienation: Marx's Conception of Man and Capitalist Society.

(Not offered 1976-77.)

January-April only. (3-0)

#### PHIL 328. (11/2) Philosophy of Law

An inquiry into the law touching upon such philosophical questions as: Is there an obligation to obey the law? Is one obligated to comply with an unjust law? Does one owe a duty of obedience to a corrupt government? How far does something's being the law depend upon there being a threat of punishment if one does not obey? How far do courts determine the contents of the laws? Is it within the competence of a judge to appeal to principles other than legal principles in deciding cases? Should the law enforce morality? Should the law protect persons from themselves?

Prerequisite: Philosophy 100 or 102, or permission of the Instructor.

Texts: M. Golding, The Philosophy of Law; H. L. A. Hart, The Concept of Law; R. Dworkin, Essays in Jurisprudence.

R. G. Beehler.

September-December only. (3-0)

## PHIL 334. (3) Philosophy of Language

Is a competent theory of language likely to advance our philosophic understanding of philosophically perplexing concepts? This and other questions are pursued with special attention to such matters as: whether there yet exists an adequate semantical analysis of meaning (Carnap); whether man possesses an innate genetic endowment with which alone standard linguistic competence is possible (Chomsky); whether meaning can adequately be accounted for in terms of men's dispositions to respond overtly to socially observable stimulations (Quine); whether a satisfactory theory of meaning needs to take into account various types of purpose with which utterances are made (Austin).

Prerequisites: Philosophy 100 or 102, Philosophy 202, or permission of the Instructor.

Texts: To be announced.

B. Campbell. (3-0; 3-0)

#### PHIL 342. (3) Minds and Machines

Could one build a machine which thinks, reasons, learns from experience, understands natural language, is creative, feels pains, or has emotions? An intelligent response to such problems must rest upon some knowledge of the current state of the art in artificial intelligence. Thus part of the course will review major techniques and recent advances in the field. Topics will probably include game playing, theorem proving, problem solving, natural language processing, simulation of neural nets, and simulation of normal/abnormal psychological processes. Following the practical survey, the course will consider the philosophical problems.

Prerequisite: One full-year course in at least one of the following areas: Computing science, neuro-physiology, philosophy or psychology; or consent of the instructor.

Texts: To be announced.

C. G. Morgan. (3-0; 3-0)

#### PHIL 348. (1-3) Directed Studies in the History of Philosophy

Under the supervision of a staff member and with the approval of the Chairman of the Department.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

#### PHIL 400. (3) Kant

Intensive study of Kant's epistemology and metaphysics, principally as presented in *The Critique of Pure Reason*.

Prerequisites: Philosophy 100 or 102, 306 or 308, and an additional 3 units in Philosophy, or permission of the Instructor.

Texts: To be announced.

(3-0; 3-0)A. R. Drengson.

## PHIL 401. (11/2) Inductive Logic and Probabilistic Reasoning

The course begins with a brief axiomatic presentation of the semi-interpreted probability calculus. Thereupon the primary objective is to find an acceptable semantics for the calculus. Various possibilities are reviewed, including: classical, empirical, personalist, and epistemological

The related quest for an understanding of the structure of inductive argument will be pursued under these headings: statistical inference, confirmation theories, acceptance theories, and the hypothetico-deductive method.

Prerequisites: Phil. 202, 222, or permission of the Instructor.

Texts: To be announced.

C. G. Morgan. (3-0)

## PHIL 403 (formerly 402). (1 1/2) Philosophical Logic

The primary objective is to determine the philosophical limitations of classical logic. By classical logic is meant bivalent first order quantification theory, together with the usual extensions of it adequate for identity theory and formal number theory. Among the questions that may be raised are: Is there satisfactory philosophical motivation for quantum logic or for many-valued logic generally? Does a good theory of reference counsel the rejection of bivalence? Does classical first order logic inhibit a philosophical understanding of existence, identity and predication? (Unavailable for credit to students with credit in former Philosophy 402.)

Prerequisite: Philosophy 202 or Math. 332 or 333, and an additional 3 units of Philosophy, or permission of the Instructor.

## PHIL 404 (formerly 402). (1 1/2) Mathematical Logic

This course reviews basic results in classical mathematical logic up to and including the Gödel incompleteness theorem for formal number theory. Topics for discussion include: the propositional calculus, standard quantification theory, first order theories with equality, the categoricity of theories, completeness and decidability, number theory, recursive functions, Gödel's theorem and Tarski's theorem. (Unavailable for credit to students with credit in former Philosophy 402.)

Prerequisite: Philosophy 202 or Math. 332 or 333, or permission of the Instructor.

(Not offered 1976-77.) (3-0)

#### PHIL 405. (3) Nineteenth-Century Philosophy

A detailed study of post-Kantian developments in Philosophy. These include the philosophy of Hegel, Fichte, Marx, and Schopenhauer, and in the British tradition -Bentham, Austin, Mill, and Spencer. The emphasis of the course will be announced at the beginning of the year.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

Texts: To be announced.

J. M. Michelsen.

(3-0; 3-0)

#### PHIL 408. (3) Contemporary European Philosophy

A study of some leading European philosophers of the 20th century, such as Husserl, Heidegger, Sartre, and Merleau-Ponty. The content of the course may vary from year to year, and the student should consult the annual departmental brochure for a more specific description of the course for a given year.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

(3-0; 3-0)

## PHIL 410 (formerly 406). (11/2) Designated Philosopher(s) or Topic(s): I

Study in depth of one or more major philosopher or philosophical topic, as determined by the Department in the light of current resources. In some years this course will be preliminary to Philosophy 411. (Unavailable for credit to students with credit in Philosophy 406 (3), except by permission.)

Prerequisites: Philosophy 100 or 102 and an additional 6 units in Philosophy, or permission of the instructor.

(Not offered 1976-77.)

September-December only. (3-0)

#### PHIL 411 (formerly 406). (11/2) Designated Philosopher(s) or Topic(s): II

Study in depth of one or more major philosopher or philosophical topic, as determined by the Department in the light of current resources. In some years this course will be an extension of Philosophy 410. (Unavailable for credit to students with credit in Philosophy 406 (3), except by per-

Prerequisites: Philosophy 100 or 102, Philosophy 410 (when offered) and an additional 6 units in Philosophy, or permission of the Instructor.

(Not offered 1976-77.)

January-April only. (3-0)

#### PHIL 414. (3) Philosophy of Mind

A study of some of the questions about mind that are of relevance both to philosophy and the various empirical sciences that deal with man, e.g. psychology, neurophysiology, sociology, and anthropology: What is a person? Is he two things—a body and a mind? Can he exist in a disembodied state? Is his intelligence just a capacity for adaptative and discriminative behaviour? Or does it depend upon inner and private mental processes? Is introspective evidence in some way unscientific? Can machines think or can they only simulate thought? Are mental processes just brain processes?

In part one of the course the general differences between dualist, behaviourist and physicalist solutions to these questions are considered. Then, in part two, more particular attention is given to the respective interpretations of such specific mental phenomena as intentions, emotions, feelings, sensations, perceptions, thoughts, beliefs, imagining and remembering.

Prerequisites: Philosophy 100 or 102, Philosophy 306 or 308, or permission of the Instructor.

Texts: To be announced.

K. W. Rankin.

(3-0; 3-0)

## PHIL 416. (11/2) Knowledge and Certainty

An analysis of the concepts of knowledge, certainty, evidence, confirmation, etc. mainly in the context of philosophical scepticism about our knowledge of the external world, other minds, the past, and the future.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

(Not offered 1976-77.) (3-0)

## PHIL 418. (11/2) Theory of Perception

A study of various theories of perception both traditional and contemporary, with special emphasis on the construction of viable models of perceptual awareness.

Prerequisite: 6 units in Philosophy or permission of the Instructor.

(Not offered 1976-77.) (3-0)

#### PHIL 421 (formerly one-half of 300). (11/2) Plato

A study of some central philosophical issues in Plato's middle and late dialogues. The content of the course may vary from year to year, and the student should consult the annual department brochure for a more specific description of the course for a given year.

Prerequisite: 9 units of Philosophy. Philosophy 102 or 207 is recommended as a suitable background for the course.

(Not offered 1976-77.)

(3-0; 3-0)

#### PHIL 422 (formerly one-half of 300). (11/2) Aristotle

A study of a main work or of a central problem in Aristotle's philosophy. The content of the course may vary from year to year, and the student should consult the annual departmental brochure for a more specific description of the course for a given year.

Prerequisite: 9 units of Philosophy. Philosophy 102 or 207 is recommended as a suitable background for the course.

(Not offered 1976-77.)

(3-0; 3-0)

#### PHIL 432. (3) Metaphysics

An enquiry into some of the more general distinctions upon which our notion of reality depends. The course will vary in emphasis from year to year. Problems for investigation will be selected from one or more of the following three groups:

- (a) On what basis do we distinguish between substance, quality, and relation? Are these distinctions purely language-relative, or are they inherent in the nature of things? Do any of these categories have a more independent or privileged type of being than the rest? Are they irreducibly distinct or are some analysable into others? Is transubstantiation possible? Is substance just a concatenation of qualities? Are qualities just resemblance-relations between particulars? Are all relations internal? Are substances primarily material? What sort of substance is a person or self?
- (b) Must every event have a cause? What sort of necessity is causal necessity? Is causal necessity nothing but constant conjunction? What distinguishes a cause from an effect? How are causal connections related to laws of nature? Are there emergent laws of nature? What is the distinction between an action and a mere happening? Do human agents have free-will? Is free-will compatible with determinism? Is it compatible with quantum-mechanical indeterminacy?
- (c) What distinguishes the temporal from the spatial order? Are space and time just parts of one space-time continuum? Is any finite space or time divisible into an infinite number of parts? Is space Euclidean? Are geometrical axioms and theorems necessarily or only contingently true? What determines time's arrow? Why is our language tensed? Does the present have any duration? In what sense is the future open?

Prerequisite: 6 units in Philosophy or permission of the Instructor.

Texts: P. F. Strawson, *Individuals*; R. Gale, ed., *The Philosophy of Time*; other writings to be announced.

(Not offered 1976-77.)

(3-0; 3-0)

#### PHIL 448. (1-3) Directed Studies in Philosophical Topics

Under the supervision of a staff member and with the approval of the Chairman of the Department.

Prerequisite: 9 units in Philosophy, or permission of the Instructor.

## PHIL 499. (0) Honours Seminar

A seminar course to provide students with an opportunity to present papers on topics they are working on and to engage in philosophical discussion. All students who plan to do a Major or Honours degree in Philosophy are encouraged to attend the meetings of this seminar even though they may not be currently enrolled in it.

Corequisite for final honours courses.

NOTE: The Department meets at the beginning of each winter session to review its undergraduate course offerings. Students are welcome to attend these meetings, and to submit, as well as discuss, proposals for change.

## **GRADUATE COURSES**

For information on the Department's graduate programme and admission requirements, consult page 152.

#### PHIL 500. (3) Problems in Philosophy

## PHIL 501T. (3) History and Philosophy of Science

A study of some turning points in the history of science with particular attention to the conceptual issues underlying scientific theory and practice.

Prerequisite: Open only to teachers enrolled in the M.Ed. Programme.

Texts: To be announced.

J. Abrams.

Summer Session only. (3-0)

PHIL 502. (3) Directed Studies

PHIL 599. (9-15) M.A. Thesis

## DEPARTMENT OF PHYSICS

R. Michael Pearce, B.Sc. (McGill), M.A., Ph.D. (Brit. Col.), Professor, and Chairman of the Department.

John L. Climenhaga, B.A., M.A. (Sask.), Ph.D. (Mich.), Professor.

John M. Dewey, B.Sc., Ph.D. (London), Professor.

Harry W. Dosso, B.A., M.Sc., Ph.D. (Brit. Col.), Professor.

Howard E. Petch, B.Sc., M.Sc. (McMaster), Ph.D. (Brit. Col.), D.Sc. (McMaster), F.R.S.C., Professor.

Lyle P. Robertson, B.A., M.A., Ph.D. (Brit. Col.), Professor.

John T. Weaver, B.Sc. (Bristol), M.Sc., Ph.D. (Sask.), Professor.

Walter M. Barss, B.A., M.A. (Brit. Col.), Ph.D. (Purdue), Associate Professor.

George A. Beer, B.A.Sc., M.Sc. (Brit. Col.), Ph.D. (Sask.), Associate Professor.

J. Anthony Burke, A.B., A.M., Ph.D. (Harvard), Associate Professor (Astronomy). (On leave of absence 1976-77.)

Reginald M. Clements, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (Sask.), Associate Professor.

Fred I. Cooperstock, B.Sc. (Man.), Ph.D. (Brown), Associate Professor.
James P. Elliott, B.S. (Ill. Inst. of Tech.), Ph.D. (Stanford), Associate Professor.

Gerhart B. Friedmann, B.Sc., M.A. (Madras), Ph.D. (Brit. Col), Associate Professor.

F. David A. Hartwick, B.Eng. (McGill), M.A., Ph.D. (Tor.), Associate Professor (Astronomy).

Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), Associate Professor. (On study leave 1976-77.)

Donald E. Lobb, B.E., M.Sc., Ph.D. (Sask.), Associate Professor.

Grenville R. Mason, B.A.Sc. (Brit. Col.), M.Eng. (McMaster), Ph.D. (Alta.), Associate Professor.

Charles E. Picciotto, A.B., M.A., Ph.D. (Calif.), Associate Professor.

Harbhajan S. Sandhu, B.A., B.Sc., M.Sc. (Panjab), Ph.D. (Brit. Col.), Associate Professor.

Colin D. Scarfe, B.Sc., M.Sc., (Brit. Col.), Ph.D. (Cantab.), Associate Professor (Astronomy).

Harry M. Sullivan, B.Sc. (Queen's), B.Sc. (Carleton), M.Sc. (McGill), Ph.D. (Sask.), Associate Professor.

Jeremy B. Tatum, B.Sc. (Bristol), Ph.D. (London), Associate Professor (Astronomy).

Arthur Watton, B.Sc. (Imp. Coll., London), Ph.D. (McMaster), Assistant Professor.

Chi-Shiang Wu, B.S. (Nat. Taiwan U.), M.S., Ph.D. (Western Res.), Assistant Professor.

Colin Brewitt-Taylor, B.A., Ph.D (Cantab.), Part-time Sessional Lecturer (1975-76).

Douglas A. Bryman, B.S. (Syracuse), Ph.D. (Vir. Poly Inst.), Part-time Sessional Lecturer (1975-76).

Ann C. Gower, B.A., Ph.D. (Cantab), Part-time Sessional Lecturer (1975). Arthur Olin, B.Sc. (McGill), Ph.D. (Harvard), Part-time Lecturer (1975-

John Goudy, C.D., Administrative Assistant.

Ken Lee, B.Sc. (U. of Vic.), Senior Scientific Assistant.

Donald E. Stenton, B.Sc. (Brit. Col.-Vic. Coll.), Senior Laboratory Instructor. (On study leave 1976-77.)

Kenneth O. Wright, B.A., M.A. (Tor.), Ph.D. (Mich), D.Sc. (Copernicus), F.R.S.C., (Director, Dominion Astrophysical Observatory), Honorary Professor.

#### PHYSICS GRADUATE PROGRAMMES

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 152; for graduate courses, see page 93.

## PHYSICS UNDERGRADUATE PROGRAMMES

Mathematics 12 is required for entry into the Physics and Astronomy undergraduate programmes; Physics 11 and 12 are expected, although students lacking Physics 11 or 12 may enter the programmes by registering in special sections of Physics 101. Students planning to take the Honours programmes should normally also have completed Chemistry 11 or 12. Advanced placement in Physics is available for students with high standing in both Mathematics 12 and Physics 12.

For a B.Sc. degree, students have a choice of four programmes: General, Major, Honours Physics and Honours in Physics and Applied Mathematics. For a B.A. degree, students may choose the General Programme in Physics

for one of their fields of concentration.

Year	General and Major	Honours Phys	Honours in Phys and Applied Math
I.	Phys 101 or 121 Math 130	Phys 101 or 121 Math 130 Chem 120 or 124	Phys 101 or 121 Math 130 Chem 120 or 124 Math 232*
II.	Phys 211 or 213 Phys 212 Math 231, or 230 and 232	Phys 211 or 213 Phys 212 Math 230 Math 232	Phys 211 or 213 Phys 212 Math 230 Math 333*
III.	[Phys 313] Phys 322 Math 330 (or 303) Math 323, or 325† and 326†, (or 345)	[Phys 313] Phys 321 Phys 322 Phys 413 Math 330 Math 323, or 325† and 326†, (or 345)	Phys 321 Phys 322 Phys 413 Math 325†, 326† Math 334†, 336† Math — †, 338
IV.	Phys 412† Phys 413 Phys electives	Phys 410†, 420† Phys 412†, 421† Phys 422† Phys 423† Phys electives (6) Phys 429 Phys 460	[Phys 313] Phys 422†, 421† Phys 423†, 420† Phys 460 Phys electives Math 445 Math electives

Astronomy 200 is a recommended elective in the second year.

## Physics 121, 212, 213 Sequence

Physics 121 is restricted to students who have obtained at least a B standing in B.C. Secondary School Physics 12 and Mathematics 12. Physics 121 will normally be followed by Physics 212 and 213 in the second year. Physics 211 and 313 will be omitted.

## Physics 101, 211, 212, 313 Sequence

Physics 101 is required by students who have not obtained at least a B standing in Physics 12 and Mathematics 12. Students who have obtained credit for Physics 11 only must register in special sections of Physics 101 with modified course content, while those who have not obtained credit for Physics 11 must register in other special sections of Physics 101 with 4 lectures per week. Physics 101 will normally be followed by Physics 211 and 212 in the second year and by Physics 313 in a subsequent year. Physics 213 will be omitted.

## **GENERAL AND MAJOR PROGRAMMES**

Specified Physics courses and acceptable electives must comprise at least 9 units of third- and fourth-year courses in the General programme and 15 units in the Major programme. The electives are normally chosen from Physics 321, 410†, 411†, 425†, 426†, 427†, 428† and Astronomy courses Physics 413 may be taken in the third year. Physics 412 may be omitted in the General programme. Fourth year students are invited to attend Physics 460 (Seminar).

 $\dagger - 1\frac{1}{2}$  units.

#### **HONOURS PROGRAMMES**

Admission to the third and fourth years of the Honours programmes requires the permission of the Department. Students in the Honours programmes will be expected to maintain at least second class standing. Normally the class of Honours degree will be determined on the basis of the grade point average calculated using the best 30 units of upper division courses in the Honours programme. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the Department may recommend the appropriate class of Major degree.

The Honours programmes normally consist of 18 units in each of the third and fourth years, with the exception that if Physics 213 is taken in the second year (Physics 313 is then omitted in the third year) only 15 units are required in the third year of the Honours Physics programme. In the Honours Physics programme the Physics electives are normally chosen from Physics 411†, 424†, 425†, 426†, 427†, 428†, and Astronomy courses. In the Honours in Physics and Applied Mathematics Programme Physics 412† and 429 are additional electives.

#### PHYSICS UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April.

Where consent of the Department is specified as a course prerequisite, this consent must be obtained from the Department Chairman or his nominee

Attention is drawn to Physics 103, a course intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Physics.

Students should note the availability of Physics 310, and Liberal Arts 305

(page 76).

In many of the courses, especially those beyond first year, students will be given short lists of reference books that are helpful supplements to the prescribed tests, but that generally do not have to be bought by the students. Students may generally expect weekly problem assignments and a number of one-hour tests during the term.

## PHYS 101. (3) Elementary Physics

Mechanics, heat, sound, light, electricity and magnetism. This is a basic course in physics for students planning a programme of study in the

Students who have not obtained credit for B.C. Secondary School Physics 11 should register in one of the special sections 1, 2 or 3 with 4 lectures per week, and those with Physics 11 only should register in Sections 4, 5 or 6 with modified course content. Sections 7, 8 and 9 are for students who have completed B.C. Secondary School Physics 12 or its equivalent. (Students with at least second class standing in both Physics 12 and Mathematics 12 may, with the permission of the Department, take Physics 121 instead of Physics 101.)

Prerequisite: Mathematics 130 or Mathematics 102, (may be taken concurrently). However, in order to qualify for further courses in physics, students must take Mathematics 130 (rather than Mathematics 102).

Text for Sections 1, 2, 3, 4, 5, 6: Weber, Manning and White, College Physics.

Text for Sections 7, 8, 9: Shortley and Williams, Elements of Physics,

G. A. Beer, R. M. Clements, J. L. Climenhaga, J. P. Elliott, G. B. Friedmann, C. E. Picciotto, H. S. Sandhu, A. Watton, C.-S. Wu.

## PHYS 103. (3) A Survey of Physics

From Newton's mechanics to nuclear physics — a description of ideas, principles and their applications. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. Credit cannot be obtained for both Physics 101 and Physics 103.

N.B.: This course is not intended for Biology students, who should enrol in an appropriate section of Physics 101.

Text: To be announced.

D. E. Lobb. (3-3;3-3)

## PHYS 121. (3) Mechanics

Vectors, statics, kinematics, relative motion, Lorentz transformation, particle dynamics, momentum, angular momentum, energy, central forces, dynamics of a system of particles, collisions, many-particle systems, heat and temperature, equation of state of an ideal gas, moment of inertia, rigid-body dynamics, relativistic dynamics, high energy collisions, oscillating motion, gravitation.

<sup>\*</sup>Mathematics 232 may be deferred to the second year, in which case Mathematics 333 must be deferred to the third or fourth year.

Prerequisites: At least a B standing in B.C. Secondary School Mathematics 12 and Physics 12, Mathematics 130 (may be taken concurrently) and consent of the Department, which may be obtained during registration.

Text: Alonso and Finn, Fundamental University Physics, Vol. 1.

H. W. Dosso. (3-3; 3-3)

#### PHYS 211. (3) Mechanics

This course is similar in content to Physics 121 but the treatment assumes a background consistent with the listed prerequisites. Laboratories on alternate weeks. Credit cannot be obtained for both Physics 121 and Physics 211.

Prerequisites: Physics 101, Mathematics 231 (may be taken concurrently) or Mathematics 230 and 232 (both may be taken concurrently).

Text: To be announced. (3-3\*; 3-3\*)

## PHYS 212. (3) Electricity and Magnetism, Electronics, and Modern Physics

Fundamentals of electricity and magnetism, introductory electronics and topics in modern Physics. Laboratories on alternate weeks.

Prerequisites: Physics 101 or 121, Mathematics 231 (may be taken concurrently, or Mathematics 230 and 232 (both may be taken concurrently).

Texts: Halliday and Resnick, Physics, Part II; Beiser, Modern Physics. H. M. Sullivan. (3-3\*; 3-3\*)

#### PHYS 213. (3) Optics, Wave Motion, Heat and Elementary Thermodynamics

Optics (geometrical and physical), wave motion and, in the second term, heat and the elementary theory and applications of thermodynamics. Laboratories on alternate weeks.

Prerequisites: Physics 121 or 211, Mathematics 231 (may be taken concurrently), or Mathematics 230 and 232 (both may be taken concurrently).

Texts: Hecht-Zajac, Optics.

W. M. Barss. (3-3\*; 3-3\*)

#### PHYS 290. (1-3) Directed Studies

This course is intended primarily to aid students transferring from other institutions to fit into the Physics programmes. Students must obtain the consent of the Department before registering.

#### PHYS 310. (3) Physics of the Environment

Physical aspects of the natural environment, the management of energy resources, and the environmental effects of technology. This course is intended for both science and non-science students, and in particular may be taken by Physics and Astronomy students as a free elective outside the prescribed programmes in Physics and Astronomy.

Prerequisites: Credit for 15 units at university level; one of Physics 101, 121 or equivalent, or permission of the Department.

Texts: To be announced.

G. A. Beer. (3-0; 3-0)

## PHYS 313. (3) Optics, Wave Motion, Heat and Thermoydynamics

Optics (geometrical and physical), wave motion, heat and the theory and applications of thermodynamics. Credit cannot be obtained for both Physics 213 and Physics 313.

Prerequisites: Physics 121 or 211, Mathematics 231 or Mathematics 230 and 232.

Texts: Sears and Salinger, Thermodynamics, Kinetic Theory and Statistical Mechanics (1st term); Morgan, Introduction to Geometrical and Physical Optics (2nd term).

H. S. Sandhu. (3-3; 3-3)

#### PHYS 321. (3) Classical Mechanics

Analytic mechanics of particles, rigid bodies, Lagrangian and Hamiltonian mechanics, potential functions, wave equation, modes of oscillation.

Prerequisites: Physics 121 or 211; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently), and consent of the Department.

Text: Symon, Mechanics, 3rd Ed.

F. I. Cooperstock. (3-0; 3-0)

\* Laboratories on alternate weeks.

#### PHYS 322. (3) Electricity and Magnetism

Fundamentals of electricity and magnetism, basic circuit theory, and concepts of electric and magnetic fields leading up to Maxwell's equations.

Prerequisites: Physics 121 or 211, and 212; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently), or consent of the Department.

Text: Scott, The Physics of Electricity and Magnetism.

W. M. Barss. (3-3; 3-3)

#### PHYS 340T. (3) Physics for Science Teachers: I

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only. Mechanics of particles and rigid bodies, relativity, wave motion, heat, thermodynamics, optics. This course will include laboratory work.

Prerequisites: At least first year university level Physics and Mathematics, Mathematics 300T, or permission of the Department.

(Not offered 1976.)

Summer Session only.

#### PHYS 410. (11/2) Topics in Mathematical Physics: I

Elementary topics in functions of a complex variable applied to physical problems.

Prerequisites: Physics 121 or 211, Mathematics 303 or 330; Mathematics 323 or 345, or both 325 and 326.

Text: Butkov, Mathematical Physics (which will also serve for Physics 420), or selected paperbacks, to be announced.

J. P. Elliott.

September-December only. (3-0)

#### PHYS 411. (11/2) Stochastic Processes in Physics

Random walk and random excitation of linear systems, including power and cross spectral analysis, with applications.

Prerequisites: Physics 322, Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326.

Text: To be announced.

A. Watton.

September-December only. (3-0)

## PHYS 412. (11/2) Physical Optics

Advanced topics in physical optics; relativistic optics, polarization, coherence, interference, diffraction, holography, lasers.

Prerequisites: Physics 213 or 313, Physics 322 or consent of the Department; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: Fowles, Introduction to Modern Optics, 2nd ed.

H. W. Dosso.

September-December only. (3-0)

#### PHYS 413. (3) Modern Physics

The major phenomena in the field of atomic and nuclear physics.

Prerequisites: Physics 212, Physics 213 or 313 (the latter may be taken concurrently) or permission of the Department; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: Semat and Albright, Introduction to Atomic and Nuclear Physics, 5th Ed.

G. R. Mason.

(3-3; 3-3)

## PHYS 420. (1 1/2) Topics in Mathematical Physics: II

Tensor calculus with applications. Integral transforms with application to boundary value problems, generalized functions and Green's functions, and other topics.

Prerequisites: Physics 410 or equivalent and consent of the Department.

Text: Butkov, Mathematical Physics, or selected paperbacks, to be announced.

J. T. Weaver.

January-April only. (3-0)

#### PHYS 421. (11/2) Statistical Mechanics

Boltzmann, Bose-Einstein and Fermi Dirac statistics.

Prerequisites: Physics 213 or 313, Physics 321, Mathematics 330; Mathematics 323 or 345, or both of 325 and 326, and consent of the Department.

D. E. Lobb.

January-April only. (3-0)

#### PHYS 422. (11/2) Electromagnetic Theory

Potential theory, Maxwell's equations, electromagnetic waves.

Prerequisites: Physics 322, Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326, and consent of the Department.

Text: Corson and Lorrain, Electromagnetic Fields and Waves.

R. M. Clements.

September-December only. (3-0)

#### PHYS 423. (11/2) Introductory Quantum Mechanics

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin.

Prerequisites: Physics 321 and 413; Mathematics 330; Mathematics 323 or 345, or both of 325 and 326, (the Mathematics courses may be taken concurrently), and consent of the Department.

Text: Eisberg, Modern Physics.

R. M. Pearce.

September-December only. (3-0)

## PHYS 424. (11/2) Atomic, Nuclear and Particle Physics

Time-independent perturbation theory, identical particles, Fermi gas, multi-electron atoms, nuclear models, collision theory. Topics in nuclear, atomic, and particle physics.

Prerequisites: Physics 423, and consent of the Department.

Text: Eisberg, Modern Physics.

R. M. Pearce.

January-April only. (3-0)

## PHYS 425. (11/2) Electronics

Electronic circuit theory with applications.

Prerequisites: Physics 322, Mathematics 303 or equivalent courses.

Text: To be announced.

H. M. Sullivan.

September-December only. (3-0)

## PHYS 426. (1 1/2) Fluid Mechanics

Introduction to basic theory of flow, kinematics of flow, Navier-Stokes equations, boundary layers, turbulent flow, introduction to compressible

Prerequisites: Physics 213 or 313, Mathematics 303 or 330: Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: To be announced

J. P. Elliott.

January-April only. (3-0)

## PHYS 427. (1 1/2) Geophysics

Physics of the earth, including atmospheric studies and extra-terrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism.

Prerequisites: Physics 322 (may be taken concurrently), Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: Garland, Introduction to Geophysics.

H. W. Dosso.

January-April only. (3-0)

#### PHYS 428. (11/2) Introductory Solid State Physics

An account of the central aspects of the Physics of solids including crystal structure and symmetry; thermal, electrical, magnetic, elastic, and optical properties of solids.

Prerequisites: Physics 322, 413 (may be taken concurrently); Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326.

Text: To be announced.

A. Watton.

January-April only. (3-0)

## PHYS 429. (3) Senior Laboratory and Theory of Measurement

Advanced experiments including student projects. Instruction on experimental techniques and theory of measurement.

Prerequisites: Physics 413, Physics 421, 422 and 423 (all three may be taken concurrently) and consent of the Department.

Text: One of: Barford, Experimental Measurements: Precision, Error and Truth; Squires, Practical Physics.

L. P. Robertson. (0-6;0-6)

#### PHYS 440T. (3) Physics for Science Teachers: II

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only, Fundamentals of electricity and magnetism, concepts of electric and magnetic fields leading up to Maxwell's equations, basic circuit theory, electronics, modern physics to include topics in atomic, solid state, and nuclear physics. This course will include laboratory work.

Prerequisite: Physics 340T.

(Not offered 1976 or 1977.)

Summer Session only.

#### PHYS 460. (0) Physics Seminar

Talks by students, faculty, and outside speakers.

(2-0; 2-0)

## PHYS 490. (1-3) Directed Studies

Students must obtain the consent of the Department before registering.

## PHYSICS GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

PHYS 500. (3) Quantum Mechanics

PHYS 501. (3) Nuclear Physics

PHYS 502. (3) Electromagnetic Theory

PHYS 503. (3) Theory of Relativity

PHYS 504. (3) Atomic and Molecular Spectroscopy

PHYS 505. (3) Advanced Classical Mechanics

PHYS 510. (3) Advanced Methods in Mathematical Physics

PHYS 511. (3) Applied Topics in Nuclear Physics

PHYS 512. (3) Upper Atmosphere Physics

PHYS 514. (3) Gas Dynamics

PHYS 515. (3) Geomagnetism and Solar-terrestrial Relationships

PHYS 516. (3) Acoustics

PHYS 517. (3) Magnetism

PHYS 518. (3) Plasma Physics

PHYS 519. (3) Selected Topics in Geophysics

PHYS 521. (3) Intermediate Energy Physics

PHYS 560. (0) Seminar

580. (1-3) Directed Studies

599. (credit to be determined but normally in this Department 6 units) M.Sc. Thesis

600. (3) Advanced Quantum Mechanics

#### PHYS 699. (credit to be determined) Ph.D. Dissertation

The thesis or dissertation requirement for advanced degrees (Physics 599 or 699) applies to all students in the department, both Physics and Astronomy.

## **ASTRONOMY GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 152; for graduate courses, see page 95.

## **ASTRONOMY UNDERGRADUATE PROGRAMMES**

Major and Honours Astronomy programmes are offered for the B.Sc. degree. The first two years of the Major and Honours Astronomy programmes are the same as the corresponding Physics programmes, with the addition of Astronomy 200.

Year III.	Major Astr 301†, 302† [Phys 313] Phys 322 Math 330 (or 303) Math 323, or 325† and 326†, (or 345)	Honours Astr 301†, 302† [Phys 313] Phys 321 Phys 322 Phys 413 Math 330 Math 323 (or 345)
Year IV.	Major Astr 400† or 402† Astr 403†, 404† Phys 412† Phys 413	or 325† and 326†  Honours  Astr 400† or 402†  Astr 403†, 404†  Astr 429  Astr 460  Phys 410†, 420†  Phys 412†  Phys 422† or 423†  Phys electives

Students wishing to enter the third year of the Major or Honours programme without having completed Astronomy 200 will normally be required to take Astronomy 200 in their third year. Astronomy 301† and 302† should then be deferred to the fourth year. Students electing to take Astronomy 400† or 402† in the third year may defer Astronomy 302† to the fourth year. Physics 313 is to be omitted if credit has been received for Physics 213.

## MAJOR PROGRAMME

Third and fourth year students are invited to attend Astronomy 460, Astronomy Seminar.

## HONOURS PROGRAMME

Admission to the third and fourth years of the Honours programmes requires the permission of the Physics Department. Students in the Honours programmes will be expected to maintain at least second class standing. Normally the class of Honours degree will be determined on the basis of the grade point average calculated using the best 30 units of upper division courses in the Honours programme. If the student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the Department may recommend the appropriate class of Major degree.

The Honours programme normally consists of 18 units in each of the third and fourth years. This may include Astronomy 200 in the third year if credit has not been obtained for this course in the second year. The electives, chosen in consultation with the Physics Department, are normally selected from Physics 411†, 421†, 422†, 423†, 424†, 425†, 426†, 427†, 428†.

## **ASTRONOMY UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

Attention is drawn to Astronomy 120, a course intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Astronomy.

## ASTR 120. (3) Elementary Astronomy

This course is primarily for students not majoring in Astronomy. It will present Astronomy as a representative science in its ancient and modern contexts. Topics will include: the earth, the moon, the planets, stars, stellar systems, galaxies, the universe, cosmology, cosmogony, space flight, and extra-terrestrial life. Practical and observational work will be included. Laboratories on alternate weeks.

Senior science and mathematics students who want a single astronomy course should take Astronomy 200 rather than Astronomy 120.

Text: Abell, Exploration of the Universe, 3rd ed.

C. D. Scarfe. (3-3\*; 3-3\*)

\* Laboratories on alternate weeks.

† —  $1\frac{1}{2}$  units.

#### ASTR 200. (3) General Astronomy

Astronomical co-ordinate systems, time, the earth-moon system, the solar system, stellar distances, spectral classification, stellar evolution, variable stars, stellar motions, star clusters, interstellar medium, structure and rotation of the galaxy, external galaxies and cosmology.

Prerequisites: Physics 101 or 121, Mathematics 130.

Text: Smith and Jacobs, Introductory Astronomy and Astrophysics.

J. L. Climenhaga.

### (3-3; 3-3)

#### ASTR 301. (1 1/2) Intermediate Astronomy: I

Selected topics in Astronomy, including: stellar equilibrium, stellar and galactic dynamics, cosmogony, solar system physics, astrochemistry. Emphasis will be on the basic concepts governing the behaviour of astronomical systems.

Prerequisites: Astronomy 200 or the consent of the Department; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: Sciama, Modern Cosmology.

F. D. A. Hartwick.

September-December only. (3-0)

#### ASTR 302. (11/2) Intermediate Astronomy: II

Selected topics in Astronomy, including: galaxies, cosmology, final stellar evolution, high energy astrophysics. Emphasis will be on recent developments in these fields. This course may not be taken for credit if credit has been obtained for Astronomy 401.

Prerequisites: Astronomy 200 or the consent of the Department; Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

Text: To be announced.

J. B. Tatum.

January-April only. (3-0)

## ASTR 400. (11/2) Radio Astronomy

The detection of cosmic radio waves; mechanisms for production of radio noise; the sources of radio waves; the contribution of radio astronomy to our knowledge of the universe.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 322, 413 (may be taken concurrently), Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326.

Text (Optional): Steinberg and Lequeux, Radio Astronomy (translated by Bracewell).

(Offered in 1976-77; will not be offered in 1977-78.)

January-April only. (3-0)

#### ASTR 402. (1 1/2) Dynamical and Galactic Astronomy

The positions and motions of the stars, the two- and three-body problems, precession, perturbation techniques, galactic rotation, the spiral structure of our galaxy. This course may not be taken for credit if credit has been obtained for Astronomy 300 in 1974 or earlier.

Prerequisites: Astronomy 200 or the consent of the Department; Physics 321 (may be taken concurrently); Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326 (the Mathematics courses may be taken concurrently).

(Not offered in 1976-77.)

January-April only. (3-0)

## ASTR 403. (1 1/2) Introduction to Astrophysics: I

The observational data of astrophysics; stellar atmospheres and the production of stellar spectra.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 213, or 313, Physics 413 (may be taken concurrently), Mathematics 303 or 330; Mathematics 323 or 345, or both of 325 and 326.

Text: Unsöld, The New Cosmos.

J. B. Tatum.

September-December only. (3-0)

#### ASTR 404. (11/2) Introduction to Astrophysics: II

The structure and evolution of the stars; interstellar matter; high energy astrophysics.

Prerequisite: Astronomy 403 or consent of the Department.

Text: Rose, Astrophysics.

F. D. A. Hartwick.

January-April only. (3-0)

#### ASTR 429. (3) Observational Astronomy

Observational and practical work, directed reading, Normally open to Honours students only. Others by consent of the Department.

Members of the Department.

(0-6:0-6)

#### ASTR 460. (0) Astronomy Seminar

Talks by students, faculty and outside speakers.

(2-0; 2-0)

## ASTR 490. (1-3) Directed Studies

Students must obtain the consent of the Department before registering.

#### **ASTRONOMY GRADUATE COURSES**

Students should consult the Department concerning the courses offered in any particular year.

ASTR 500. (3) Stellar Atmospheres

ASTR 501. (3) Stellar Structure and Evolution

ASTR 502. (3) Binary and Variable Stars

ASTR 503. (3) The Interstellar Medium

ASTR 504. (3) Galactic Structure

ASTR 505. (1 1/2) Galaxies

ASTR 511. (11/2 or 3) Advanced Topics in Astronomy

ASTR 560. (0) Seminar

ASTR 580. (1-3) Directed Studies

The thesis requirement for advanced degrees (Physics 599 or 699) applies to all students in the department, both Physics and Astronomy.

## DEPARTMENT OF POLITICAL SCIENCE

Walter D. Young, B.A. (Brit. Col.), B.A., M.A. (Oxon.), Ph.D. (Tor.), Professor and Chairman of the Department. (On study leave 1976-77.)

Brian Chapman, B.A., M.A., D.Phil. (Oxon.), Visiting Professor (1975-

Thomas C. Pocklington, B.A. (Tor.), Ph.D. (Indiana), Visiting Professor (1975-76).

Edgar S. Efrat, B.A. (Reed Coll.), M.A., Ph.D. (Texas), Associate Pro-

Richard J. Powers, B.A. (New Mexico), M.A., Ph.D. (Claremont), Associate Professor

Mark H. Sproule-Jones, B.Sc. (Econ.) (London), M.A., Ph.D. (Indiana), Associate Professor.

Neil A. Swainson, B.A., B.Ed., M.A. (Brit. Col.), Ph.D. (Stanford), Associate Professor.

Howard L. Biddulph, B.S. (Brigham Young), M.A., Ph.D. (Indiana), Assistant Professor.

Norman J. Ruff, B.Sc. (Econ.) (Southampton), M.A. (McMaster), Ph.D. (McGill), Assistant Professor.

J. Terence Morley, B.A. (Dalhousie), Lecturer.

R. Jeremy Wilson, B.A., M.A. (Alta.), Lecturer.

James J. Gow, B.L., Ph.D., LL.D. (Aberdeen), Part-time Sessional Lecturer (1975-76).

Gerald L. Kristianson, B.A. (Brit. Col.), Ph.D. (Australian Nat. Univ.), Part-time Sessional Lecturer (1975-76).

Daniel H. Selchen, B.A. (Manitoba), B.Phil. (Oxon.), Sessional Lecturer (1975-76).

Patrick J. Smith, B.A., M.A. (McMaster), Sessional Lecturer (1975-76). Sigmund A. Toth, B.A. (Brit. Col.), Part-time Sessional Lecturer, Correctional Education Programme (1975-76).

## **GRADUATE PROGRAMME**

For information on studies leading to the M.A. degree, see page 152; for graduate courses, see page 98.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

The Department of Political Science offers General, Major and Honours programmes leading to the B.A. and an M.A. graduate programme. Third and Fourth Year students not enrolled in the general, major or honours programmes may take as a free elective any third or fourth year course in Political Science for which no prerequisite or other restriction is specified.

Information about current course offerings may be obtained from the

Departmental Office in the Cornett Building.

General - A concentration in political science under the general programme requires 6 units of political science courses numbered at the 100 or 200 level and 9 units at the 300 or 400 level.

Major — The Major programme is open to students who have completed 6 units of political science courses numbered at the 100 or 200 level. Major students are required to complete 15 units of political science courses at the 300 or 400 level with a minimum of 3 units from each of at least three of the Groups I-VII.

Honours — The Honours programme in political science is open to third year students who have a 'B' average in 6 units of political science courses numbered at the 100 or 200 level. An overall "B" average is required to continue the programme in the Fourth Year. Students seeking admission to this programme should apply to the Department by August 1.

The Honours programme requires completion of 24 units of political science courses numbered at the 300 and 400 level with a minimum of 3 units from each of at least three of the Groups I-VII. The 24 units must

include Poli. 337 and Poli. 499.

All Honours students are required to attend and participate in the Departmental Seminar and Fourth Year Honours students must successfully complete a programme of directed research and a graduating essay

(Poli. 499).

The class of an Honours degree in Political Science is determined by a student's overall average in the 24 units of Political Science required at the 300 and 400 level and the grade obtained in Poli. 499. A First Class Honours requires a first class graduating average (a GPA of at least 6.5) and an overall first class average of 6.5 in 24 upper division units of Political Science with a letter grade of at least "A—" in Poli. 499. Where an Honours student does not meet the requirements for a First Class Honours but has a first class graduating average, the Department will recommend that the student be given the option of graduation with Second Class Honours or a Major with Distinction. A Second Class Honours requires a second class graduating average (a GPA of at least 3.5) and an overall second class average of at least 4.5 in 24 upper division units of Political Science with a letter grade of at least "B" in Poli. 499.

Students should note the availability of Liberal Arts 305 as an elective in their senior years. Students considering graduate work in political science are strongly advised to take Poli. 300 and 337, and some course work in statistical methods. Major and Honours students are urged to consult a faculty member in the Department prior to the planning of

their Third and Fourth Year's programmes.

## **DEPARTMENT OF POLITICAL SCIENCE — UNDERGRADUATE COURSE STRUCTURE**

## First and Second Year 100 (3)

 $201 \ (1\frac{1}{2}) \quad 210 \ (1\frac{1}{2}) \quad 220 \ (1\frac{1}{2}) \quad 230 \ (1\frac{1}{2}) \quad 240 \ (1\frac{1}{2}) \quad 250 \ (1\frac{1}{2})$ 

Third and Fourth Year				
I	II	III	IV	
Political Theory	Comparative Government	Public Law	Contemporary Political Analysis	
300 (3)	311 (3)	320 (3)	$330 (1\frac{1}{2})$	
400 (3)	312 (3)	325 (11/2)	331 (11/2)	
407 (3)	313 (3)	420 (3)	337 (3)	
408 (11/2)	314 (3)	421 (3)	430 (11/2)	
409 (1½)	315 (11/2)	427 (3)		
	$317 (3)$ $417 (1\frac{1}{2})$			
V	VI	VII	VIII	
International Relations	Public Administration and Policy Analysis	Canadian Government and Politics	Honours	
340 (3)	350 (3)	$360 (1\frac{1}{2})$	490 (1½ or	
342 (11/2)	450 (3)	361 (11/2)	3)	
343 (11/2)	456 (3)	362 (11/2)	499 (3)	
445 (3)		465 (3)		
446 (11/2)		466 (11/2)		

## PROGRAMME STRUCTURE

6 units of courses numbered at the 100 or 200 level

General	
9 units of courses numbered at the 300 or 400 level.	1 4 ir

#### Major Honours

5 units at the 300 or 00 level. These must nclude 3 units in each of at least 3 of the Groups I-VII.

337, 499 and additional units to a total of 24 at the 300 or 400 level. These must include 3 units in each of at least 3 of the Groups I-VII.

## **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April. One-term courses will be listed in the timetable to be published in July.

## POLI 100. (3) Canadian Government and Politics

An introduction to Political Science through an examination of the politics and institutions of Canadian government. The course will include analysis of the social and economic context of Canadian politics and will cover such topics as parties, voting behaviour, nationalism and regionalism, federalism, parliament, the bureaucracy, the courts and the policy processes.

Students who have credit in Political Science 216 or 318 or 410 in previous years may not enrol in this course for credit. (3-0:3-0)

## POLI 201. (1 1/2) Political Ideologies

An introduction to the study of politics through an examination of the major twentieth century political doctrines and ideologies. Emphasis will be given to those which are most relevant to Canadian political life: nationalism, conservatism, liberalism and socialism. Some attention will be paid to problems raised by indoctrination and ideological thinking.

September-December; also January-April. (3-0)

#### POLI 210. (11/2) Comparative Government

An introductory course designed to acquaint the student with political concepts and the basic structures and processes of modern government through an examination of foreign governments, e.g., USA, UK, USSR....

September-December; also January-April (3-0)

## POLI 220. (1 1/2) Law and Politics

An introduction to the study of the role of law in the political process. A description of the judicial structure in Canada, and the processes of the judiciary in the English-speaking world as compared with the European tradition. The relationship between the judiciary and other parts of the political system. The problems of order and legal change will be discussed with illustrations drawn from criminal and constitutional law. Emphasis will be placed on legislation and delegation as instruments of legal change and social reform. There will be one written assignment and one formal examination at the end of the term.

September-December; also January-April. (3-0)

#### POLI 230. (1 1/2) Political Behaviour

An introduction to the contemporary analysis of politics. Topics will include elections, parties, groups, bureaucracies, public enterprise, and legislatures. Topics will emphasize federal, British Columbia provincial and local government experience.

September-December; also January-April (3-0)

## POLI 240. (1 1/2) International Politics

A general introduction to the study of international politics. Attention will be directed to the foundation, development and current structure of the states-system. Specific important events in the relationships among states will serve to illuminate the causes, goals, means and subsequent consequences of major foreign policy decisions. (3-0)

## POLI 250. (11/2) Public Policy Formation in Canada

An introductory examination of the impact of cultural, economic and political factors in the determination of Canadian public policies.

This course will include some case studies which compare the policy (3-0)formation process in Canada with that of other countries.

#### GROUP I - POLITICAL THEORY

## POLI 300. (3) Traditional Political Thought

An examination of "classic" writings and persistent themes in the history of western political thought. Emphasis will be placed upon the development of normative political theory through the work of certain key figures, such as Plato, Hobbes, Rousseau and Marx. (3-0:3-0)

#### POLI 400. (3) Nineteenth Century Political Thought

A close study of nineteenth century social and political thought, both as a basis for understanding contemporary ideologies and as a source of explanatory political ideas. The centre of gravity will be the thought of Hegel, Marx, J. S. Mill and T. H. Green. The major doctrines — conservatism, utilitarianism, positivism, liberalism, socialism, nationalism, social Darwinism and anarchism — will also be discussed.

#### POLI 407. (3) Contemporary Political Thought

An examination of some of the major twentieth century contributions to the development of normative political theory. Some of the material to be discussed is outside the confines of traditional political discourse and reflects the fragmented nature of contemporary political thought. Emphasis will be placed more upon the theoretical and philosophical than upon the doctrinal and ideological modes of political thought. Most of it, no matter how analytical, is primarily evaluational and the expression of a commitment.

## POLI 408. (11/2) Communist Political Thought: I

An analysis of the contributions to political thought of the classical thinkers of Marxism-Leninism: Marx, Engels, Lenin, Trotsky, Bukharin, Lukacs, Gramsci, Mao Tse-Tung. Emphasis will be placed more upon the theoretical and analytical rather than ideological modes of thought, comparing interpretations of political reality, conceptions of political legitimacy

Restricted to students in Third Year or above.

#### POLI 409. (11/2) Communist Political Thought: II

An examination of the major contributions to political thought of contemporary thinkers in the Communist world. The fragmentation of political values and the decline of utopian ideas among thinkers in Yugoslavia, Poland, Czechoslovakia, Hungary and the U.S.S.R. will be examined.

Restricted to students in Third Year or above.

## GROUP II - COMPARATIVE GOVERNMENT

## POLI 311. (3) Western European Government and Politics

A comparative analysis of the political culture, political behaviour, parties and interest groups, governmental institutions and policy-making processes of Western European democracies. Primary emphasis will be given France, the German Federal Republic, Italy and the United Kingdom. (3-0; 3-0)

## POLI 312. (3) Communist Political Systems

An analysis of governmental processes in Communist ruled political systems, with emphasis upon Eastern Europe, the U.S.S.R., and mainland China; comparative analysis of communist revolutions, parties and groups, leadership elites, policy-making and administration, political culture and socialization; and the development of the Communist international systems.

(3-0:3-0)

#### POLI 313. (3) American Government and Politics

An analysis of the politics and institutions of government in the United States. Areas of study will include such topics as the presidential system and executive-legislative relations; judicial behaviour; political parties and electoral behaviour; and federal framework.

Not open to students who have credit in Political Science 310.

(3-0; 3-0)

## POLI 314. (3) British Government and Politics

An analysis of the politics and institutions of government in the United Kingdom. Areas of study will include such topics as: the development of the parliamentary system; the monarchy, prime minister and cabinet; the public service; parliament, the electoral system, voting behaviour and political parties.

Not open to students who have credit in Political Sicence 310.

(3-0; 3-0)

#### POLI 315. (11/2) Government and Politics in the U.S.S.R.

An intensive analysis of the governmental process in the Soviet Union; examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy-making process, administration and the judicial system.

#### POLI 317 (formerly 411). (3) Politics of Developing Nations

An examination of the current political development and the political processes in developing countries, with emphasis on Asia and Latin America. The course is organized on a seminar basis; each participant is required to prepare a research report on a topic chosen in consultation with the instructor.

#### POLI 417. (11/2) Government and Politics in Sub-Saharan Africa

An introduction to the politics of the African nation-states south of the Sahara. Particular attention is devoted to the comparative facets of governments, political ideologies, modernization, aid and trade, and Canadian

#### GROUP III - PUBLIC LAW

#### POLI 320. (3) Constitutional Law

An introduction to the basic problems of Canadian constitutional law; federalism; constitutional amendment; distribution of authority; judicial review; the protection of civil liberties; and related problems. The primary method of grading will be by written examinations at the end of the first and second terms. It is strongly recommended that students take Political Science 100 or have credit for Political Science 216, before taking this

#### POLI 325. (11/2) Law and Public Policy

This course continues the examination of the role of law in the political process begun in Political Science 220. The course will examine in greater depth the part played by the judiciary in the control of power exercised by other participants in a political system. There will be an examination of legal philosophy and its impact on policy formation in the modern state. In particular, the nature and definition of justice will be examined and its importance in modern society. There will be an examination of law and morals and the limits of effective legal action. (3-0)

## POLI 420. (3) Administrative Law

Study of the relation between law and the administrative process; procedures and powers of administrative tribunals; and judicial and legislative control of administrative action.

Prerequisite: It is recommended that students take one of Political Science 320 or 325 prior to taking this course.

(Not offered 1976-77.)

(3-0; 3-0)

## POLI 421. (3) Advanced Constitutional Law

An advanced legal analysis of specific Canadian Constitutional issues which may include the following: civil liberties, the Supreme Court of Canada, the search for an amendment formula and constitutional revision, the impact of the division of legislative power on public policies.

(Not offered 1976-77.)

(3-0; 3-0)

## POLI 427. (3) Jurisprudence

Advanced study of contemporary jurisprudential theory including an examination of legal realism, natural law, positivism, sociological jurisprudence and recent studies in the field of judicial behaviour. Special emphasis will be placed on studying law as a social science and analyzing the relationship between law and politics.

Prerequisite: Political Science 320 OR 325 with a grade of "B-" or higher.

(Not offered 1976-77.)

(3-0; 3-0)

#### GROUP IV - CONTEMPORARY POLITICAL ANALYSIS

## POLI 330. (1 1/2) Public Opinion and Electoral Behaviour

The course is designed to give the student a close familiarity with the key theoretical and research studies on (a) the factors underlying the formation of individual political opinions and the making of electoral decisions; (b) the formation and effectiveness of party and candidate strategy for electoral purposes; and (c) the relation of elections to the political system. Emphasis will be given to B.C. data based studies, and a research project on some aspect of B.C. public opinion and electoral behaviour will be part of the course obligations.

#### POLI 331. (11/2) Executive and Legislative Politics

A consideration of the functions, roles, behaviour and organization of representative assemblies in Canada, Britain and the United States. Executive-legislative relationships will be emphasized.

#### POLI 337. (3) The Scope and Methods of Political Science

The purpose of the course is twofold: (a) to acquaint the student with the activities of modern political scientists, in particular their attempts to devise empirical theories of politics, and the problems they face in undertaking any empirical research project; and (b) to afford the student an opportunity to conceptualize and experiment with a political problem area of interest to himself. Course obligations include one examination at Christmas time, and one paper due at the end of the Spring Term. (Not recommended as a general elective; recommended for Honours students in their third academic year.) (3-0:3-0)

#### POLI 430. (11/2) Mass Media and Politics

An examination of communication and the dissemination of information in the Canadian political system. The course will cover both historical and contemporary questions and deal with the work of such scholars as Wallas, Innis, and McLuhan.

(Not offered 1976-77.)

(3-0)

#### GROUP V - INTERNATIONAL RELATIONS

#### POLI 340. (3) International Studies

Seminar in the theory and practice of relations among modern nationstates. An examination of the traditional methods of studying international politics will be followed by an introduction to normative and empirical theory and contemporary methodologies. (3-0:3-0)

#### POLI 342. (11/2) International Law

An introductory seminar in the principles and practices of international law. Focus will be both historical and contemporary, and the emphasis will be in the political implications of international law.

## POLI 343. (1 1/2) International Organization

An introductory seminar in the theory and development of international organizations. Primary attention will be devoted to the League of Nations and the United Nations; however, regional and subordinate intergovernmental organizations will be examined. (3-0)

## POLI 445. (3) Comparative Foreign Policy

Seminar in the formulation, execution and evaluation of foreign policy. The development of a theoretical model for foreign policy analysis will be followed by an application of the model to the current foreign policies pursued by the major nation-states. Each student will be responsible for systematically examining the foreign policy of one nation-state.

## POLI 446. (11/2) Canadian Foreign Policy

An examination of contemporary Canadian foreign policy, its aims, methods and effects and Canada's role in world affairs. Particular attention will be placed on the context (historical, political, cultural, geographic, economic) of policy making and the instruments (diplomatic, legal, political, economic, military) of its execution.

Each student, in addition to gaining a general appreciation of Canada's international position, will be expected to research some particular aspect or relationship of Canadian foreign relations. (3-0)

#### **GROUP VI — PUBLIC ADMINISTRATION AND POLICY ANALYSIS**

#### POLI 350. (3) Public Administration

An introduction to the evolution of the administrative process in the English-speaking world; approaches to bureaucracy; the theory and practice of administrative decision-making; a review of substantive issues in budgeting, organizational structure, personnel administration; administrative power and responsibility. Two essays plus fortnightly colloquium sessions.

(3-0; 3-0)

## POLI 450 (formerly 454/455). (3) An Introduction to Local, Regional and Metropolitan Government and Politics

A seminar dealing with such topics as: the theory of local government; its emergence in England, Continental Europe, the United States, and Canada; variable approaches to legislative, executive and administrative processes at the local level; politics of local government finance; power, politics and policy response in some representative local jurisdictions; the uniqueness and the complexity of governing metropolitan areas; formal and informal approaches to integrating governmental action in metropolis; the politics of governmental reform; metropolis and 'superior' level governments.

(3-0; 3-0)

## POLI 456 (formerly 435). (3) Political Institutions and Public Policy

The course will apply Public Choice theory to the analysis of political institutions and institutional behaviour. Consideration will be given to the theory of public goods and externalities, methods of evaluating the efficiency of public services, and the design of institutional arrangements to reflect the demands of the citizen-consumer for diverse public policies. Emphasis will be placed on public policies- in B.C. in general and Greater Victoria in particular. Course obligations will include a research project on a local policy problem or aspect of a local problem in the Spring Term. (3-0; 3-0)

## GROUP VII - CANADIAN GOVERNMENT AND POLITICS

#### POLI 360 (formerly 316/419). (11/2 formerly 3) Canadian Federalism

This course is intended to provide an understanding of the policy processes of Canadian federalism and the nature of current public outcomes with special attention to their implications for British Columbia and the other Western Provinces. The course will review interpretations of the cultural and political bases of the federal system, and the structures and dynamics of the conduct of intergovernmental relations. Areas of public policy to be analyzed in some depth from a federal-provincial perspective will include such topics as Continentalism and Resource Development; Oil and Energy Policy; Western Regional Economic Growth; Communications; Post-Secondary Education; Urban and Environmental Policies; Human Resources; Social Services and Anti-Poverty Programmes; and Federal Provincial Financial Arrangements.

## POLI 361 (formerly 332). (1 $\frac{1}{2}$ ) Interest Groups and Parties in Canada

A survey of the major theoretical studies of political parties, interest groups and theories of representation in the Canadian context. Particular attention will be paid to the development, structure and activity of Canadian political parties. (3-0)

## POLI 362. (11/2) Comparative Provincial Politics

A comparative analysis of political structures and processes in the Canadian provinces, and the variations in their forms of political behaviour.

(3-0)

## POLI 465 (formerly 415). (3 formerly 11/2) British Columbia Government and

This course examines the primary features of the political process and political institutions in British Columbia seen in the context of the political and economic development of the province. The course will examine the socio-economic bases of the political system, the nature of major political cleavages and their manifestation in the provincial and federal dimensions of B.C. political life and public policy. Attention will be given to their influences on the development of the provincial party system and party organization, the growth of provincial parliamentary institutions, cabinet government and the provincial bureaucracy, and the interactions between the political executive and the Legislative Assembly.

(3-0; 3-0)

## POLI 466 (formerly 416: 418). (1/2) Issues in Canadian Politics

An analysis of selected issues in the Canadian political process with a primary focus on the formulation of public policy and party politics at the federal or provincial level. (3-0)

#### GROUP VIII - HONOURS

## POLI 490 (formerly 480). (1 $\frac{1}{2}$ or 3) Directed Reading

Directed reading and/or research for Honours Students under the supervision of an available faculty member. Open to Majors only with the permission of the Department.

## POLI 499 (formerly 490). (3) Directed Research and Graduation Essay

Individual direction for fourth-year Honours Students only.

## **GRADUATE COURSES**

Students should consult the Department to determine the graduate courses offered in any particular term.

- POLI 500. (1  $\frac{1}{2}$  or 3) Seminar in Political Theory
- POLI 505. (11/2) M.A. Seminar: Contemporary Political Analysis
- POLI 511. (11/2 or 3) Seminar in Political Behaviour
- POLI 512. (11/2 or 3) Seminar in Communist Political Development
- POLI 516. (11/2 or 3) Seminar in Canadian Politics
- POLI 517. (11/2 or 3) Seminar in African Politics
- POLI 520. (1 1/2 or 3) Seminar in Canadian Constitutional Problems
- POLI 535. (1 1/2 or 3) Seminar in Public Choice
- POLI 540. (1  $\frac{1}{2}$  or 3) Seminar in International Relations
- POLI 550. (1 1/2 or 3) Seminar in the Administrative Process
- POLI 580. (6) Legislative Internship
- POLI 585. (11/2) M.A. Seminar: Selected Political Problems

## POLI 590. (Credit to be determined) Directed Readings

Offered under the following headings:

590A and 590B — Political Theory

590C and 590D — Comparative Politics

590E and 590F - Public Law

590G and 590H — Contemporary Political Analysis

590J and 590K — International Relations

590L and 590M — Public Administration

590N and 590P — Canadian Federal and Provincial Politics

POLI 599. (3) Thesis

## DEPARTMENT OF PSYCHOLOGY

Gordon N. Hobson, B.A., M.A., Ph.D. (Alta.), Professor and Chairman of the Department.

Alex Bavelas, B.S. (Springfield), M.A. (Iowa), Ph.D. (M.I.T.), Professor. Horace D. Beach, B.S.A., B.A. (Sask.), M.A. (Oxon.), Ph.D. (McGill), Professor.

William H. Gaddes, M.A. (Brit. Col.), Ph.D. (Claremont), Professor.

G. Alexander Milton, B.A. (West. Wash.), M.S. (Ore.), Ph.D. (Stanford), Professor.

Otfried Spreen, B.A. (Bonn), Dipl-Psych., Ph.D. (Freiburg), Professor.
Christopher D. Webster, B.A. (Brit. Col.), M.A. (Queen's), Ph.D. (Dalhousie), Professor.

Ronald A. Hoppe, A.B. (Mich.), M.A., Ph.D. (Mich. St. U.), Associate Professor.

Richard B. May, B.A. (Whitman), M.A., Ph.D. (Claremont), Associate Professor and Assistant Chairman of the Department.

Charles W. Tolman, B.S., M.S., Ph.D. (Wash.), Associate Professor.

R. Leslie D. Wright, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Associate Professor.

Loren E. Acker, A.A., B.A., M.A., Ph.D. (Calif., Los Angeles), Assistant Professor.

J. K. Adamowicz, B.A., M.Sc. (Calgary), Ph.D. (West. Ont.), Assistant Professor.

Janet B. Bavelas, A.B., M.A., Ph.D. (Stanford), Assistant Professor.

Pam Duncan, B.A. (Wis. St.), M.A. (Chicago), Ph.D. (Wis.), Assistant

Bram C. Goldwater, B.A. (McGill), M.A. (Cornell), Ph.D. (Bowling Green), Assistant Professor.

Clare P. Porac, B.A. (Duquesne), M.A., Ph.D. (New York), Assistant Professor.

Lorne K. Rosenblood, B.S. (Case Western Reserve), M.A., Ph.D. (Ohio), Assistant Professor. (On study leave 1976-77.)

Frank J. Spellacy, B.A. (West. Wash.), M.Sc. (Ore.), Ph.D. (U. of Vic.), Assistant Professor. (On study leave 1976-77.)

Louis Sutker, B.A. (Tulane), M.S., Ph.D. (Georgia), Assistant Professor.

David R. T. Walker, B.A. (U. of Vic.), M.A., Ph.D. (Iowa), Assistant Professor.

Fouad A. Hamdi, M.D. (Alexandria), Ph.D. (Edin.), Honorary Professor. Lawrence E. Dettweiler, B.A. (Calif. Berkeley), Ph.D. (Minnesota), Parttime Sessional Lecturer (1975-76).

Herbert W. Kee, B.A. (York), M.A., Ph.D. (Brit. Col.), Part-time Sessional Lecturer (1975-76).

Fraser Simmons, Part-time Sessional Lecturer (1975-76).

#### **GRADUATE PROGRAMMES**

For information on studies leading to the M.A., M.Sc., Ph.D. degrees, see page 153; for graduate courses, see page 101.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

Several undergraduate programmes are offered by the Department of Psychology. The concentration in the General programme is designed to provide flexibility and a general background for students planning to enter other fields such as social work or journalism. The Honours programme is recommended for students planning graduate work in scientific or professional psychology. The Major programme requires a degree of specialization in the last two years, and may permit the student to proceed to graduate study or to professional training or business careers if sufficiently high standing is obtained.

A student may proceed to either a B.A. or B.Sc. degree in Psychology. Students proceeding to the B.A. degree must take a minimum of 12 units of work outside psychology in any one or more disciplines offering a major programme leading to the B.A. degree (e.g. 6 units of English plus 6 units of Sociology would satisfy this requirement). Students proceeding to the B.Sc. degree must take a minimum of 12 units of work at any level from outside Psychology in any one or more disciplines offering a major programme leading to the B.Sc. degree (e.g. 6 units of Mathematics plus 6

units of Biology would satisfy this requirement).

General — Psychology 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. The student's choice of one second year Psychology course is recommended in the second year. Students must complete a minimum of three courses (9 units) numbered 300 or

above.

Major - Psychology 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. The student's choice of one second-year Psychology course is recommended in the second year. Major students must take Psychology 300 plus a minimum of four additional

Psychology courses (12 units) numbered above 300.

Honours — Students seeking an honours degree in Psychology must apply to the Honours Advisor of the Department before the start of their fourth year. All interested students should seek the advice of the Advisor before their third year; those with an overall first-class average are encouraged to apply for early admission to the programme at this time. Psychology 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. Psychology 200, or 220, or 230, or 240, or 250 is recommended in the second year. Psychology 300, 301, 499 and either 400 or 401 are required, plus an additional three psychology courses (9 units) numbered above 300. At least one of these additional courses must be chosen from each group (A and B).

Psychology 311 Learning, and either 312 or 313 Psychology 411 Perception Psychology 414 Motivation Psychology 415 Human Neuropsychology Psychology 423 Physiological Psychology Psychology 424 Psychophysiology Psychology 434 Animal Behavior

Psychology 330 Personality Psychology 331 Social Psychology Psychology 335 Developmental Psychology Psychology 402 Experimental Social Psychology Psychology 430 Abnormal Psychology

To graduate with an Honours degree, a student must have obtained a minimum 3.5 grade point average for all work completed outside the department, and a minimum 5.5 grade point average in psychology courses numbered 300 and above. The class of Honours (1st or 2nd) will be determined by the student's grade point average obtained in Psychology courses numbered 300 and above. Students with an average of 6.50 or higher will receive a first-class Honours degree; those with an average of 5.50 to 6.49 will receive a second-class Honours degree. A student in the Honours programme whose grade point average in Psychology courses numbered 300 and above is 5.49 or lower will be graduated in the Major programme. An Honours student who qualifies for a Second Class Honours degree but whose graduating grade point average is First Class, will be given the choice of graduating with a Second Class Honours degree or a First Class Major degree.

#### RECOMMENDED ELECTIVES

#### FIRST AND SECOND YEARS

Students planning to major or honour in Psychology are urged to select at least one course from each of several areas outside of the Psychology Department. A first year mathematics course or recent completion of Mathematics 12 or its equivalent is prerequisite for Psychology 300. Students who plan to take Psychology 230, or 415 or 423 or 434 are encouraged to take Biology 150. Members of the department will be pleased to recommend other courses to fit individual programmes.

## THIRD AND FOURTH YEARS

The Psychology Department recognizes the diversity of career orientations which might lead a student to concentrate in Psychology. Accordingly it suggests the following guidelines for upper level courses.

Students planning to enter social services - mental health, school psychology, social work, parole, child care and related fields: Psychology 311, 330, 331, 335, 415, 430 or 432, 450, plus courses in philosophy and social sciences.

Students planning careers in business and industry, civil service, government, personnel work: Psychology 311, 330, 331, 334, 401, 414, 432, plus courses in economics, political science, geography, mathematics.

Students planning to pursue advanced degrees in Psychology, but not enroling in Honours: Psychology 300, 301, 311, 400 or 401, and at least one course from each group (A and B) listed above in the description of the honours programme.

NOTE: The Bachelors degree in Psychology is intended primarily to prepare the student for further advanced study in Psychology or related fields (Education, Social Welfare, etc.), and in no way implies professional competence as a psychologist without such advanced training. Although students may on occasion find employment of a psychological nature with an undergraduate degree, it is expected that further preparation, perhaps in the form of in-service training, will normally be required by employers.

## **UNDERGRADUATE COURSES**

## PSYC 100. (3) General Psychology

A survey of the history and current status of selected problems in psychology including motivation, learning, perception, brain processes, psychological testing, and applied psychology. Regular laboratory periods, involving demonstrations and student experiments, will be held throughout the year to introduce the student to basic methodological principles in relation to the various lecture topics.

Members of the Department. (3-1; 3-1)

Psychology 100 is a prerequisite for all courses numbered 300 and above, unless an exemption is specifically stated in the course description. Second year courses are open without the Psychology 100 prerequisite to all except first year students, although it is recommended that the student first take Psychology 100 wherever possible. Students may receive credit for no more than two second year Psychology courses. Students who have completed Psychology 100 may enroll in one course numbered 300 and above in their second year, but may take a total of no more than two Psychology courses at this time.

Students are cautioned that enrolment in a second year Psychology course without Psychology 100 could mean that they will be required to take Psychology 100 at a later date in order to qualify for admission to a course at the 300 or 400 level.

#### PSYC 200. (3) Introduction to Experimental Psychology

A study of empirical approaches to the understanding of human behaviour and methods of its control. Topics in learning, perception and motivation will be explored, with an examination of psychological theories of the processes underlying these phenomena, experimental findings, and applications outside the laboratory. Related methodological techniques will be integrated with these topics throughout the course.

L. E. Acker, R. L. D. Wright.

(2-2; 2-2)

#### PSYC 220. (3) Introduction to Personality

A study of empirical approaches to the understanding of individual personality. Includes several theories of personality (e.g. Freud, Jung, Maslow), methods of assessing personality, creativity, psychopathology. Related methodological techniques will be integrated with these topics throughout the course.

## PSYC 230. (3) Introduction to Psychobiology

A study of empirical approaches to the understanding of the relationships between biological functions and of behaviour. Topics will include the study of the brain mechanisms underlying human and animal behaviour, psychological effects of brain damage and such confemporary problems as drugs and behaviour, behaviour genetics, physiological correlates of emotion, sleep and dreaming, and the treatment of behaviour disorders. An attempt will be made to integrate many of these topics within the context of the physiology of memory. Related methodological techniques will be integrated with these topics throughout the course.

#### PSYC 240. (3) Introduction to Social Psychology

A study of empirical approaches to the understanding of man's social behaviour. Topics will include social facilitation, social learning, aggression, conformity, attitudes, conflict, communication, and group performance. Related methodological techniques will be integrated with these topics throughout the course. (2-2; 2-2)

#### PSYC 250. (3) Introduction to Applied Psychology

The course covers aspects of social psychology, abnormal psychology, personality, environmental psychology, industrial and personnel psychology as pertinent to the study of social welfare, social work, child welfare, public administration and law. (3-0; 3-0)

#### PSYC 300 (3) Research Methods in Psychology

Intensive development of statistical reasoning and methodology in the application of research procedures to various areas of psychology. Emphasis upon meaningful actual usage of such techniques in the planning, conduct, analysis, interpretation, and reporting of empirical research by the class and individual students. Potential Honours students are encouraged to enrol in Psychology 300 in their second year.

Prerequisite: Mathematics 12 or equivalent or permission of the instructor. Mathematics 151 is recommended, especially for students who plan to continue on to Psychology 400 or 401 after completing Psychology 300.

## PSYC 301. (3) Philosophical and Theoretical Foundations of Contemporary Psychology

An examination of the theoretical and methodological assumptions underlying the psychological study of behaviour, and their historical origins and development. A consideration of topics in the philosophy of science, theoretical models in modern psychology, controversial issues, and a comparison of different approaches to the study of human behaviour.

## PSYC 311. (11/2) Basic Topics in Conditioning and Learning

An introduction to the basic concepts, principles and phenomena of the learning process. Topics covered will include the distinction between classical and instrumental conditioning, the role and nature of reinforcement and the conditioning of "involuntary" responses. Attention will be given to both a review of theoretical positions and issues, and the application of learning principles outside the laboratory. Students may take both Psychology 312 and Psychology 313, but Psychology 311 is the prerequisite for both of these more advanced courses. (3-0)

## PSYC 312 (formerly part of 311). (1½) Advanced Topics in Conditioning and Learning

A more advanced and in-depth treatment of topics introduced in Psychology 311. Areas covered will include schedules of reinforcement, stimulus generalization, aversive control and conditioned reinforcement. Emphasis will be placed upon both animal research and applications to human behavior. Laboratory and/or take-home assignments will be given.

## PSYC 313. (11/2) Concept Learning and Memory

An introduction to cognitive processes related to learning. Consideration will be given to man as an information processor and how he selects, stores, and retrieves information about his environment. Emphasis will be placed upon the role of stimulus attributes and strategies of the learner in discrimination and concept learning, as well as recall and recognition memory. Some implications for applied situations will be discussed. Group and/or individual laboratory projects will be assigned.

Prerequisite: Psychology 311 (1½ units). (2-2)

#### PSYC 330. (3) Personality

An introduction to contemporary personality theory and research. Survey of several traditional theories of individual behaviour (e.g. Freud, Rogers, need-achievement), plus emphasis on newest developments in the field (e.g. social influences on personality). Considerable emphasis on research and methods of evaluating theories. Several exams; one or two term projects.

J. B. Bavelas. (3-0; 3-0)

## PSYC 331. (3) Social Psychology

A survey of theories and findings in the following areas: social perception, socialization, social motivation, attitude development and change, interpersonal interaction, and group processes. Each student prepares one paper each term.

R. A. Hoppe. (3-0; 3-0)

#### PSYC 334. (3 Industrial Psychology

An exploration of various applications of psychology to organizational behaviour and personnel selection with special emphasis on industry. Typical subjects for discussion: work environment, reward structures, training and counselling, problems of change and transition, advertising and marketing, human engineering, administrative process, organizational communications. Basis for grades: Objective exams on independent readings, short essay quizzes based on lectures, group projects. (2-2; 2-2)

## PSYC 335. (3) Developmental Psychology

Psychological development; determiners of psychological growth; motor, emotional, social, intellectual, language and personality development. Implications for the guidance of psychological development are indicated. (Faculty of Education does not recognize this course for credit for Education students.)

NOTE: Some sections of this course may substitute laboratory time for lecture time. Laboratory times will be announced during the term.

L. E. Acker, P. Duncan, G. A. Milton. (3-0; 3-0)

## PSYC 350. (3) Environmental Psychology

Environmental psychology is an interdisciplinary area which stresses the behavioural effects of man's interaction with the physical environment. The emphasis of this course will be on this interaction and will include such topics as: (a) methods of environmental assessment; (b) the physical environment and how it is perceived and processed; (c) man's view of and interaction with his natural and man-made habitat; (d) ecological psychology and man as part of an ecological system.

Prerequisite: Psychology 100 or registration in Environmental Studies programme. (2-2; 2-2)

## PSYC 370 (LING 370). (3) Psycholinguistics

Offered in collaboration with the Department of Linguistics. A course in the psychology of language covering such topics as the nature and function of language, language acquisition, experimental psycholinguistics, the relationship of language and cognition, language and socio-cultural factors, semantics, bilingualism, non-verbal communication, and the pathology of linguistic behavior.

Prerequisites: Linguistics 100 and Psychology 100 or permission of instructor or Department.

(Not offered 1976-77; will be offered 1977-78.) (3-0; 3-0)

## PSYC 390. (1 $\frac{1}{2}$ or 3) Special Problems in Psychology

Directed independent study for the student. Complete arrangements must be made with an instructor in the Department before registering.

Members of the Department.

## PSYC 400. (3) Advanced Methods

The course is an introduction to advanced research designs and their underlying rationale. Experimental design and statistical techniques will be applied to problems in psychology. Extensive treatment will be given to use of the analysis of variance. The first half of the course will emphasize the relative merits of various designs involving multiple independent variables. The second half of the course will emphasize designs involving multiple dependent variables (regression analysis, factor analysis, multivariate analysis of variance). The general orientation throughout the course will be towards problems of application.

Prerequisite: Psychology 300 or equivalent.

R. B. May. (2-2;2-2)

## PSYC 401. (3) Psychometrics

The application of quantitative methods to problems in applied psychology. Topics to be covered include the measurement of individual differences, scaling, correlational analysis, test construction, and research issues in psychological assessment. Individual research projects may be conducted. A formal written report of the student's completed research project is required.

Prerequisite: Psychology 300 or equivalent.

J. B. Bavelas.

(2-2:2-2)

## PSYC 402. (3) Experimental Social Psychology

An examination of research and methodology in selected areas of social psychology. Individual research projects may be conducted.

Prerequisite: Psychology 300, equivalent, or permission of the instructor.

## PSYC 411. (3) Sensation and Perception

This course will deal with the physical bases of sensation and the relationship between sensation and what we perceive. Although the emphasis will be on human visual processing, audition and the other senses will also be covered. The course will include such topics as: psycho-physics, sensory physiology, information processing, visual distortion and cognitive involvement in human perception. This is a research oriented course and data collection is emphasized.

C. P. Porac. (2-2; 2-2)

## PSYC 414. (3) Motivation

The primary question - how best can the forces underlying human behaviour be studied. Theoretical, conceptual and methodological issues arising out of consideration of both natural science (man is a machine?) and human science (man is more than a machine?) models form the basis of the course. Topics include the role of the unconscious, emotions, cognition, physiology, creativity, intention, etc., in determining or reflecting human behaviour.

Prerequisite: Psychology 311 (with instructor's approval, may be taken concurrently).

G. N. Hobson. (3-0; 3-0)

## PSYC 415. (3) Human Neuropsychology

The study of brain-behaviour relationships. The first term of the course is primarily concerned with the neurophysiological and neuroanatomical bases of behaviour. The second term focusses upon research and clinical studies in neuropsychology. Demonstrations of selected patients with cerebral lesions at the Royal Jubilee Hospital will be arranged during the second term. One term paper is required. Biology 150 is recommended.

(2-2; 2-2)

## PSYC 423. (11/2 formerly 3) Advanced Topics in Physiological Psychology

Topics will include the physiology of the sensory systems, memory, and attention, with special emphasis upon the relationship between brain processes and experience.

Prerequisite: Psychology 230 or Biology 150.

D. R. T. Walker. (3-0)

## PSYC 424. (formerly one-half of 423) (1 ½) Human Psychophysiology

The study of the physiological correlates of behaviour in the intact human subject. Topics will include the autonomic nervous system; measures and principles of research with the polygraph; physiological correlates of emotion, sleep and dreaming and psychopathology; conditioning of autonomic response; lie detection; and psychosomatic disorders.

Prerequisite: Psychology 230 or Biology 150 is recommended, but not required.

B. C. Goldwater. (3-0)

#### PSYC 430. (3) Abnormal Psychology

Definitions and models of the behaviour disorders; study of behaviour disorders with regard to social attitude, origins, development, manifestations, assessment and treatment. Emphases are on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes one formal term paper. This course is intended for Psychology majors and Honours. Credit will not be given for both Psychology 430 and 432.

L. Sutker. (3-0:3-0)

## PSYC 432. (3) Survey of Clinical Psychology

An introductory survey of clinical psychology, including clinical research, methods of behaviour assessment and modification, and the role of the clinical psychologist in the community. Tentative structure of the course includes guest speakers, lectures and discussion. Admission is open only to third and fourth-year students. (A second-year psychology course is not required as a prerequisite). Not open to Majors and Honours in Psychology.

P. Duncan.

## PSYC 434. (3) Animal Behaviour

A study of the phylogeny, functions and processes of animal behaviour from both the field-descriptive and laboratory-experimental points of view. This course is given in association with Biology 444 and 445 and students may not register for both Psychology 434 and Biology 444-445.

Prerequisite: Biology 150. Recommended: Psychology 300 or Biology

#### PSYC 450. (3) Mental Deficiency

A survey of research theory and applied aspects of mental subnormality. Open to non-psychology students in related fields. Includes visits to several institutions. One term paper required.

Prerequisite: Psychology 100 and either fourth-year standing or written permission of the instructor. (3-0; 3-0)

## PSYC 490. (11/2 or 3) Advanced Special Problems in Psychology

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering. Members of the Department.

## PSYC 499. (3) Honours Thesis and Seminar

Students are required to complete an Honours Thesis. Class meetings will be centered around seminar discussions of student research.

Prerequisite: Honours standing. Laboratory hours will be arranged.

B. C. Goldwater, Members of the Department. (2-2; 2-2)

## **GRADUATE COURSES**

Students must consult the Department concerning courses offered in any year.

PSYC 501. (1 1/2-4 1/2) Proseminar

PSYC 502. (1-41/2) Research Apprenticeship

PSYC 503. (1 1/2-6) Practicum in Clinical Psychology

## PSYC 504. (11/2-6) Individual Study

May be offered in areas A through Z (excluding I and O). The student must consult with his instructor about the area of his individual study prior to registration. A maximum of 6 units of PSYC 504 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

PSYC 505. (11/2-6) Animal Learning

PSYC 506. (1 1/2-6) Human Learning

PSYC 507. (1 1/2-6) Personality

PSYC 508. (1 1/2-6) Motivation

PSYC 509. (11/2-6) History of Psychology

PSYC 510. (11/2-6) Theories of Psychology

PSYC 511. (11/2-6) Comparative Psychology

PSYC 512. (11/2-6) Physiological Psychology

PSYC 513. (11/2-6) Sensory Psychology

PSYC 514. (11/2-6) Perception

PSYC 515. (11/2-6) Human Neuropsychology

PSYC 516. (11/2-6) Psychotherapy

PSYC 517. (11/2-6) Research Methods in Psychology

PSYC 518. (11/2-6) Psychometric Methods

PSYC 519. (11/2-6) Social Psychology

PSYC 520. (1 1/2-6) Developmental Psychology

PSYC 521. (11/2-6) Human Factors

PSYC 522. (11/2-6) Personnel Psychology

PSYC 523. (11/2-6) Psychopathology

PSYC 524. (11/2-6) Psychological Assessment

PSYC 525. (1 $\frac{1}{2}$ -6) Learning Disorders

PSYC 526. (11/2-6) Social Processes

PSYC 527. (1 1/2-6) Social Design

PSYC 528. (11/2-6) Clinical Psychology

PSYC 529. (1 1/2-6) Psychophysiology

PSYC 530. (11/2-6) Animal Motivation and Conflict

PSYC 531. (11/2-6) Environmental Psychology

PSYC 532. (1 1/2-6) Pharmacopsychology

Courses PSYC 505 to 532 inclusive may be taken in areas A, B, C and/or D. More than one area may be taken in any one Winter Session to a maximum of 6 units at the discretion of the student's Supervisory Committee. Each area carries 1½ units of credit. The specific content of each area will be designated prior to registration.

PSYC 570. (1 1/2-3) Psycholinguistics

PSYC 599. (3-6) Thesis

PSYC 602. (1-6) Independent Research

PSYC 603. (11/2-6) Advanced Clinical Practicum

PSYC 604. (11/2-6) Individual Study

May be offered in areas A through Z, (excluding I and O). The student must consult with his instructor about the area of his individual study prior to registration. A maximum of 6 units of PSYC 604 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

PSYC 605. (0) Practicum in the Teaching of Psychology

PSYC 628. (11/2-6) Advanced Clinical Psychology

May be taken in areas A, B, C, and/or D, but only by Ph.D. candidates.

PSYC 699. (3-15) Ph.D. Dissertation

## SCIENCE

SCIE 300. (3) The Natural Sciences: I

This course is directed to the promotion of a better understanding, among non-scientists, of what the natural scientists attempt; and of what they achieve and fail to achieve. It will be concerned with concepts and attitudes rather than the techniques. No formal laboratories are associated with this course.

The course is intended primarily for students whose main field of studies

is outside the natural sciences.

The format of the course is flexible, but the normal procedure will involve lectures and seminars so that students will come in contact with instructors from different science disciplines.

Prerequisite: This course is open to non-science students in their third and fourth years and to others with the permission of the Course Chairman.

Not open to students in B.Sc. programmes.

(Not offered 1976-77.)

(1-0-2:1-0-2)

# DEPARTMENT OF SLAVONIC AND ORIENTAL STUDIES

Zelimir B. Juricic, B.A., M.A. (Brit. Col.), Ph.D. (Nottingham), Assistant Professor (Russian and Serbo-Croatian) and Chairman of the Department.

Andrew Donskov, B.A., M.A. (Brit. Col.), Ph.D. (Helsinki), Visiting Associate Professor (1975-76).

Hsin-i Hsiao, B.A. (Tunghai), M.A., Ph.D. (Harvard), Assistant Professor (Chinese).

Terence M. Rickwood, B.A., Ph.D. (Liverpool), Assistant Professor. (On study leave 1976-77.)

Nicholas V. Galichenko, B.A., M.A. (Brit. Col.), Lecturer (Russian).

Isabel M. Heaman, B.A. Litt. (Oxon.), Part-time Sessional Lecturer (1975-76).

Valerian Revutsky, B.Sc. (Kiev), B.A. (Moscow), M.A. (Tor.), Sessional Lecturer (1976-77).

Victoria Speers, B.A. (Brit. Col.), M.A. (Colorado), Part-time Sessional Lecturer (1975-76).

Michiko Warkentyne, B.A. (Tokyo), B.A. (West. Ont.), Part-time Sessional Lecturer (1975-76).

## GENERAL, MAJOR AND HONOURS PROGRAMMES

All students planning to take Honours in the Department of Slavonic and Oriental Studies must consult with the Department concerning their selection of other courses. For both Major and Honours students, Serbo-Croation 300 is strongly recommended as an elective course (usually taken in the Third Year).

Students wishing to take Third or Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. Students with advanced credits from secondary schools, or colleges, or those who are competent in Russian will be placed at an appropriate level. Students wishing to challenge courses are

referred to the regulations given on page 12 of the Calendar.

Admission to the Honours programme, which should be sought at the end of the Second Year, requires permission of the Department, and interested students should consult the Department as early as possible in the first two years. Students will be admitted to the Honours programme only if they have obtained at least a second class standing in the Second Year. They will be required to maintain at least a second class average in Russian courses taken in the Third and Fourth Years. An Honours programme in the Department of Slavonic and Oriental Studies normally requires a total of 66 units over a four-year period. Students specializing in Russian (including Honours) will find that they have sufficient electives to enable them to concentrate in a second field. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc.

Students wishing to take Russian as a teaching area in the Faculty of Education's Secondary Curriculum should consult page 119 of the Calendar.

#### PROGRAMMES IN RUSSIAN

GENERAL		MAJOR		HONOURS	
First Year					
Russian 100	(3)	Russian 100	(3)	Russian 100	(3)
Other courses	(12)	Other courses	(12)	Other courses	(12)
Second Year					
Russian 200	(3)	Russian 200	(3)	Russian 200	(3)
Russian 201	(3)	Russian 201	(3)	Russian 201	(3)
Other courses	(9)	Other courses	(9)	Other courses	(9)
Third and Four	th Years				
Russian 302	(3)	Russian 302	(3)	Russian 302	(3)
6 units of Russia	an	Russian 306	(3)	Russian 306	(3)
courses numbere	d	Russian 406	(3)	Russian 406	(3)
400 and above	(6)	6 additional un	its	Russian 499	(3)
Other courses	(21)	of Russian cours	of Russian courses		of
		numbered 400		Russian courses	
		and above	(6)	numbered 400	
		Other courses	(15)	and above	(9)
				Other courses	(15)

## COURSES

#### RUSSIAN

#### RUSS 100. (3) First Year Russian

This is a beginners' course concentrating on the basic grammar and vocabulary. The aim of the course is to lead the student quickly into reading, writing and oral work. The course is designed to meet the needs of students in a variety of fields.

Prerequisite: None, the course is open to all students.

Texts: Stilman and Harkins, Introductory Russian Grammar (2nd Ed.). (3-1; 3-1)

Members of the Department.

## RUSS 200. (3) Second Year Russian

This course is the sequel to Russian 100. In the first term the grammar is completed. The second term is devoted to the study of an original literary text in Russian as well as wide reading of modern Soviet periodicals.

Prerequisite: Completion of Russian 100, or the permission of the instructor.

Texts: Stilman and Harkins, Introductory Russian Grammar; S. Khavronina, Russian As We Speak It; additional reading material to be announced. (4-0;4-0)

#### RUSS 201 (formerly 300). (3) Nineteenth Century Russian Literature Part I: Romanticism and Naturalism

This course is intended as an introduction to Russian literature from 1800-1830. Short stories and poetry of the period will be read in the original Russian, and there will be lectures on the Romantic and Naturalist movements as well as material on individual writers. There will be one major paper per term.

Prerequisite: Completion of Russian 100. (Credit cannot be obtained for both Russian 201 and Russian 300.)

Texts: Pushkin, Pikovaya Dama, Tsygany; Lermontov, Demon, Taman' Gogol, Shinel'; Desyat' russkikh poetov. (3-0:3-0)

## RUSS 301. (11/2) Aspects of Russian Culture

A survey of outstanding cultural trends against the background of Russia's past and present. Lectures will focus on traditional concepts and major developments in religion, philosophy, folklore, literature, art, architecture and music in an attempt to give students a cultural perspective for viewing the Russian way of life. Other areas of discussion will include an assessment of Western attitudes towards Russia. No knowledge of Russian is required.

Prerequisite: None, the course is open to all students.

Prescribed reading: Lawrence, History of Russia; Kamen, ed., Great Russian Stories; F. D. Reeve, ed., Great Soviet Short Stories.

January-April only. (3-0)

#### RUSS 302. (3) Intermediate Composition and Stylistics

This course, conducted in Russian, stresses translation of selected passages, the regular composition of essays and conversational skill. A basic knowledge of Russian grammar is assumed. A broad selection of reading material is provided aiming at comprehension and discussion.

Prerequisite: Completion of Russian 200.

Texts: Borras and Christian, Russian Syntax; Borras and Christian, Russian Prose Composition; P. Waddington, Advanced Translation From Russian Prose. (3-0:3-0)

#### RUSS 306. (3) Nineteenth Century Russian Literature Part II: Realism

This course is the sequel to Russian 201 and is a study of Russian literature from 1830 to the end of the nineteenth century. There will be lectures on the development of Russian realist prose as well as material on the social and historical background of the time. There will be class assignments and one major paper per term.

Prerequisite: Completion of Russian 200 or Russian 201.

Texts to be selected from the following titles: Pushkin, Evgenii Onegin; Lermontov, Geroi Nashego Vremeni; Gogol, Mertvye Dushi; Turgenev, Otsy i deti; Tolstoy, Sevastopol'skie Rasskazy; Goncharov, Oblomov; Dostoevsky, Zapiski iz Mertvogo Doma; Chekhov, Muzhiki, Chelovek v

#### RUSS 390. (3) Russian Reading Course

This is a one-year, terminal course, intended for students who wish to acquire rapidly a reading knowledge of modern Russian. During the first term the basic Russian grammar is covered while in the second term students read material from current Soviet journals in the fields of the Natural and Social sciences and the Humanities. Material is chosen corresponding to the students' own special areas of interest. Since thirty per cent of world scientific literature is now published in Russian, this course is of special interest to students contemplating advanced work in the Natural or Social Sciences, particularly since most Canadian and North American graduate schools require a reading knowledge of a least one foreign language.

Prerequisite: None, the course is open to all students. (Students who have passed Russian 100 cannot receive credit for this course.)

Text: To be announced.

Members of the Department.

(3-0:3-0)

## RUSS 400. (3) Structure of Modern Russian

A study of modern Russian grammatical structures, followed by an examination of Russian phonology, phonetics, morphology, lexicology and syntax.

Prerequisite: Russian 200 or permission of the instructor.

Texts: To be announced.

Members of the Department.

(3-0; 3-0)

## RUSS 401. (3) Soviet Literature (in translation)

The course examines selected major works and trends in Russian literature since the Revolution: Symbolism, Imagism and Futurism (Blok, Esenin and Mayakovsky), the Utopian and Anti-Utopian novel (Zamyatin, Olesha), Soviet Science Fiction (A. Tolstoy, Elfremov), the Revival of Romanticism (Gorky), and the Psychological novel (Babel, Sholokhov), Socialist Realism (Gladkov, N. Ostrovsky), the Symbolist novel and Post-Stalinist literature (Pasternak), the Cryptographical novel (Bulgakov, Solzhenitsyn). The focus is on early modern and contemporary authors with particular consideration of Solzhenitsyn. There will be lectures and discussion in English and one essay per term.

Prerequisite: None, the course is open to all students.

Texts: Zamyatin, We; Babel, Red Cavalry; Olesha, Envy; Sholokhov, The Quiet Don; Bulgakov, The Master and Margarita; Pasternak, Doctor Zhivago; Solzhenitsyn, One Day in the Life of Ivan Denisovich, The Cancer Ward, First Circle; Blake, Half-Way to the Moon; Brown, Russian Literature Since the Revolution. (3-0; 3-0)

## RUSS 402. (3) History of Russian Drama

The course, given in Russian, deals with the evolution of Russian drama from its beginnings to the Soviet period. Special emphasis is given to the most important Russian dramatists: Fonvizin (Brigadir), Griboedov (Gore ot uma), Pushkin (Boris Godunov), Gogol (Revizor), Ostrovsky (Groza), L. Tolstoy (Vlast' t'my), Gorky (Na dne), Chekhov (Vishnyevyi sad), Mayakovsky (Klop), Andreyev (Tot, kotoryi poluchaet poshchochiny), Bulgakov (Dni Turbinykh).

Prerequisite: Russian 200 or 201.

Texts: Slonim Marc, Russian Theatre From the Empire to the Soviets. (Not offered 1976-77.) (3-0;3-0)

#### RUSS 403. (3) Dostoevsky and Tolstoy (in translation)

This course undertakes a detailed study of two writers who have had an enormous impact on world literature. It is conceived primarily as a seminar course, and students will be expected to examine and discuss the major works of these authors. Some material will be presented on the literary background from which both these giants emerged. Essays will be assigned periodically. The final mark is based on term work and class participation.

Prerequisite: None, the course is open to all students.

Texts: Dostoevsky, Crime and Punishment, The Idiot, The Devils, The Brothers Karamazov; Tolstoy, Childhood, Boyhood and Youth, War and Peace, Anna Karenina, Ressurrection. (3-0; 3-0)

#### RUSS 405. (3) Russian Poetry, 1815 to the Present

The course deals with Russian poetry from the early nineteenth century to the contemporary Soviet period. Special emphasis is placed on the major Romantic works of Pushkin and Lermontov, on the nature lyrics of Tyutchev and Fet, and on the Realist verse of Nekrasov. The Symbolist, Acmeist and Futurist movements in poetry will be examined in detail, as well as the development of verse under Socialist Realism. In conclusion, some trends in recent Soviet poetry will be considered. Lectures and discussions will be conducted in Russian. One essay per term and several short assignments.

Prerequisite: Russian 200 or 201.

Texts: Russkie Poety XIX Veka; Russkaya Literatura XX Veka; Penguin Book of Russian Verse. (3-0; 3-0)

#### RUSS 406. (3) Advanced Composition and Stylistics

The course is conducted entirely in Russian and emphasizes written composition, stylistic analysis and conversational fluency. Formal reading material includes works by Chekhov, Bunin, Kazakov and others. Taking into account the student's discipline and area of interest, appropriate articles from the contemporary press are supplied. Exercises in syntax and stylistics are also provided. The course involves daily reading assignments and weekly written work. No language laboratory is required, but tapes are used in class. One essay per term in Russian is required,

Prerequisite: Completion of Russian 302.

Texts: Borras and Christian, Russian Syntax and Russian Prose Composition; Belevitskaya-Khalizeva, Exercises in Russian Syntax, Pulkina, Russian. (3-0; 3-0)

## RUSS 407. (3) Old Church Slavonic

An introduction to Old Church Slavonic and its origins. The Cyrillic and Glagolithic alphabets. St. Cyril and Methodius. The influence of Old Church Slavonic on Russian and other Slavic languages. Readings in Old Church Slavonic.

Prerequisite: Russian 200.

(Not offered 1976-77.)

(3-0; 3-0)

## RUSS 408. (11/2) History of the Russian Language

The development of Russian from the earliest written period to the present. Historical phonology, morphology, lexicology. The first Russian grammars and dictionaries. The role of Lomonosov and Pushkin in the formation of the Russian language. Students should take this course in conjunction with Russian 409.

Prerequisite: Russian 200 or permission of the instructor.

Texts: Chernykh, Istoricheskaya grammatika russkogo yazyka; P. Yefimov, Istoriya russkogo literaturnogo yazyka.

Members of the Department.

September-December only. (3-0)

## RUSS 409. (1 $\frac{1}{2}$ ) Early Russian Literature; Kievan Period to the End of the Eighteenth Century

Readings from Old, Medieval and Eighteenth Century Russian literature. Students should take this course in conjunction with Russian 408.

Prerequisite: Russian 200 or permission of the instructor

Texts: N. Gudzii, Khrestomatiya po drevnei russkoi literature, Istoriya drevnei russkoi literatury; Stender-Petersen, Anthology of Old Russian Literature; A. Kokorev, Khrestomatiya po russkoi literature XVIII veka; D. Blagoi, Istoriya russkoi literatury XVIII veka.

Members of the Department.

January-April only. (3-0)

## RUSS 410. (3) Comparative Slavonic Linguistics

A comparative and contrastive study of the three Slavic language groups and their development from Common Slavonic.

Prerequisite: Russian 200.

(Not offered 1976-77.)

(3-0; 3-0)

## RUSS 411. (3) The Silver Age: Russian Literature 1880-1917

This course, given in Russian, is devoted to a study of Expressionism, Impressionism, Symbolism and New Realism in Russian literature from 1880 to the Revolution. Emphasis will be placed on the major works of the following writers: Garshin, Chekhov, Andreev, Kuprin, Artsybashev, Sologub, Korolenko, Uspensky, Bely, Blok, Zaitsev, Gorky, and Bunin.

Prerequisite: Russian 200 or 201.

Texts: To be announced.

Members of the Department.

(3-0; 3-0)

RUSS 430. (3) Directed Reading

RUSS 499. (3) Honours Essay

#### SERBO-CROATIAN

#### SERB 300. (3) First Year Serbo-Croatian

This course is designed for students of Russian wishing to acquire basic reading and translating competence in a second Slavic language and reasonable familiarity with its literature. Knowledge of a second Slavic language is imperative for candidates in Russian Language and Literature seeking admission to a higher degree in Slavic studies. Through carefully selected literary texts and scholarly materials others students will broaden their understanding and appreciation of Yugoslavia's rich culture, history, literature, language and peoples. Tapes are provided of some of the texts handled in class. The two best students will be awarded the Yugoslav Government scholarships for Summer Study in Yugoslavia (Zagreb and Dubrovnik).

Prerequisite: Completion of 200 level course in a foreign language or its equivalent, or the permission of the instructor.

Texts: Babic, Slavna, Serbo-Croatian Reading Passages; Partridge, Monica, Serbo-Croatian: Practical Grammar and Reader.

Z. B. Juricic. (3-0; 3-0)

#### SERB 400. (3) Directed Reading

This Directed Reading Course will survey major trends and authors in Croatian and Serbian literatures from the Renaissance period to the present. Required reading will be drawn from the following texts: Javarek, Vera, Serbo-Croatian Prose and Verse; Franges, Sicel, Rosandic, Pristup Knjizevnom Djelu; Sicel, Rosandic, Pregled Knjizevnosti s Citankom; Zaninovic, Vice, Citanka s Pregledom Jugoslavenskih Knjizevnosti, Vols. III, IV.

Prerequisite: Completion of Serbo-Croatian 300.

Z. B. Juricic.

(3-0; 3-0)

## JAPANESE

## JAPA 100. (3) First Year Japanese

First introductory course in the Japanese language. Japanese letters will be introduced from the beginning.

Text: Japanese Language Promotion Centre, Intensive Course in Japaese, Elementary. (4-1; 4-1)

## JAPA 200. (3) Second Year Japanese

Reading and writing of Japanese script (Kana and Kanji), as well as conversational practice.

Prerequisite: Completion of Japanese 100 or its equivalent.

Text: Japanese Language Promotion Centre, Intensive Course in Japanese, Elementary; Sakade, A Guide to Reading and Writing Japanese.

(4-1; 4-1)

#### JAPA 301. (11/2) Aspects of Japanese Culture

A survey of the Japanese cultural developments from the Nara period to the present through an examination of selected major works of Japanese literature in translation. The selections include *The Tales of Genji, Noh Drama*, Basho's *Haiku*, *Bunraku* by Chikamatsu, and outstanding novels since the Meiji Restoration.

Prerequisite: None, the course is open to all students.

Prescribed reading: To be announced.

Members of the Department.

(May not be offered 1976-77.)

January-April only. (3-0)

#### CHINESE

## CHIN 100. (3) First Year Chinese

First introductory course in Mandarin (romanized approach). Chinese characters will be introduced in the second term.

Texts: DeFrancis, Beginning Chinese: DeFrancis, Character Text for Beginning Chinese.

H. Hsiao. (4-1;4-1)

#### CHIN 200. (3) Second Year Chinese

Reading of traditional and simplified Chinese characters, as well as conversational practice.

Prerequisite: Completion of Chinese 100 or its equivalent.

Text: DeFrancis, Character Text for Beginning Chinese.

(4-1;4-1)

## CHIN 301. (11/2) Aspects of Chinese Culture

A survey of the development of the outstanding aspects of Han Chinese intellectual tradition from earliest to modern times, with special reference to national, social, political, artistic, religious, and thought patterns, and to problems of modern change. Such topics as the conceptualizations of the natural world, the role and nature of man, the ideal order of society, the ideal world order, the role of art and literature, and the characteristics of religion will be analyzed in depth. No knowledge of Chinese required.

Prerequisite: None, the course is open to all students.

Prescribed reading: Wm. Theodore de Bary, et al, Sources of Chinese Tradition; John T. Meskill, An Introduction to Chinese Civilization.

H. Hsiao. September-December only. (3-0)

## SOCIAL WORK

#### S W 400. (3) Social Work

Introduction to the philosophy, concepts, and practice of social work in

This course is a required part of the B.A. with Major in Social Welfare but is open as an elective to students in Arts and Science.

Students may not receive credit for both Social Work 200 and Social Work 400.

(May not be offered after 1976-77.) (3-0; 3-0)

## DEPARTMENT OF SOCIOLOGY

- Donald W. Ball, B.A. (Calif., Santa Barbara), M.S. (Ore.), M.A., Ph.D. (Calif., Los Angeles), Associate Professor and Chairman of the Depart-
- M. Elaine Cumming, B.A., M.A. (Sask.), Ph.D. (Radcliffe-Harvard), Professor.
- Robert B. Hagedorn, B.A. (San Fran. St.), M.A. (Wash.), Ph.D. (Texas), Professor.
- Gordon K. Hirabayashi, B.A., M.A., Ph.D. (Wash.), Visiting Professor (1975-76).
- T. Rennie Warburton, B.A. (Leeds), Ph.D. (London), Associate Professor.
- Roy E. L. Watson, B.A., M.A., Ph.D. (Tor.), Associate Professor.
- Stephen D. Webb, B.A. (William and Mary), M.A. (George Washington), Ph.D. (Tennessee), Associate Professor.
- R. Alan Hedley, B.A., M.A. (Brit. Col.), Ph.D. (Ore.), Assistant Professor. (On study leave 1976-77.)
- Daniel J. Koenig, A.B., (Notre Dame), M.Sc. (Florida St.), Ph.D. (Illinois), Assistant Professor.
- S. Charles Lazer, A.B. (Princeton), M.A., Ph.D. (Mich. St.), Assistant Professor.

Leonard M. Thornton, B.A. (Edinboro State), M.A., Ph.D. (Illinois), Assistant Professor.

Elena S. H. Yu, B.A. (San Carlos-Philippines), M.A., Ph.D. (Notre Dame), Assistant Professor.

Ellen T. Gee, B.A. (Brit. Col.), Sessional Lecturer (1975-76).

Timothy J. Segger, Part-time Sessional Lecturer, Correctional Education Programme (1975-76).

#### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 153; for graduate courses, see page 107.

## UNDERGRADUATE PROGRAMMES

The Department offers General, Major, and Honours programmes. Students interested in any of these programmes are urged to consult the department undergraduate advisor as early as possible.

Sociology 100 is required for all three programmes. Sociology 209 or Sociology 200 (or both 209 and 200 at the student's discretion) are also required in all three programmes. These requirements may be satisfied by course challenge or may be omitted by permission of the department.

General: In addition to the above, the General programme requires nine

additional units of Sociology from courses numbered 300 and above.

Major: In addition to Sociology 100 and Sociology 209 or 200 or both, the Major programme requires Sociology 300, 371, 375 and 71/2 additional units of Sociology numbered 300 and above.

Honours: In addition to Sociology 100 and Sociology 209 or 200 or both, the Honours programme requires Sociology 300, 371, 372, 375, 499, and nine additional units of Sociology numbered 300 and above. It is recommended that Honours students take Sociology 371 and 372 as early as

To receive a First-Class Honours degree a student must obtain a grade of at least A— in Sociology 499, and a minimum grade point average of 7.0 or higher for all Sociology courses numbered 300 and above, and have a minimum graduating average of 6.5.

To receive a Second-Class Honours degree a student must obtain a grade of at least B- in Sociology 499, and have a grade point average of at least 6.0 in all Sociology courses numbered 300 and above, and have a minimum graduating average of 3.5.

Honours students who do not meet the above requirements, but complete those for a Major in Sociology, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.5 would receive a Major in Sociology with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

## COURSES

Unless indicated otherwise, courses begin in September and end in April.

Prerequisite for Third and Fourth Year courses: Courses numbered 300 and above may be chosen as electives by students in other departments if one of the following conditions is satisfied.

- (a) Completion of Sociology 100
- (b) The student has at least Third Year standing and the permission of the course Instructor.

#### SOCI 100 (formerly 200). (3) Introduction to Sociology

A general introduction to the perspectives and methods of sociology, including a consideration of basic concepts and problems in the analysis of groups and societies. (3-0; 3-0)

## SOCI 200. (3) Canadian Society

The structure and development of modern Canadian Society. Topics include: ethnicity, immigration and population trends; social stratification, power and educational opportunity; problems of national identity and integration. Material is taken from research and scholarship in sociology and other social sciences.

Prerequisite: At least Second Year standing or completion of Sociology (3-0; 3-0)

## SOCI 209. (3) Development of Modern Sociology

The sociological perspective as exemplified by theoretical and methodological innovations. Emphasis will be on the development of sociology from the late nineteenth century to the present. Students will participate in research projects in order to gain familiarity with sociological research techniques and strategies.

Prerequisite: Sociology 100. (3-0; 3-0)

#### SOCI 300 (formerly 400). (3) Sociological Theory

A consideration of the nature of theory and explanation, with special emphasis on major sociological theories and theorists. The relation of earlier sociological thought to contemporary theory. (3-0; 3-0)

## SOCI 301. (3) Deviance and Social Control

Criminological conceptualizations and statistics are critically analyzed. Various types of social deviance are analyzed and used as case studies to outline the evolution of social control from religion through law to medicine and science. (3-0; 3-0)

#### SOCI 304 (formerly 305). (3) Interaction and Socialization

Models of interaction and socialization; transmission and learning of sociocultural categories and roles; self, identity and society; psychological sociology and social psychology; naturalistic and quantitative approaches to the study of interaction; ethnomethodology and studies in everyday life.

(3-0; 3-0)

#### SOCI 305. (3) Sociology of Families and Households

Consideration of similarities and differences regarding families and households as an alternative unit of analysis. In the first term the focus will be upon families and households in comparative perspective, and their relationship to the larger society. In the second term the internal organization of families and households and interpersonal processes within them will be examined. Sex roles. The socialization of the young. Alternatives to the conventional family. (3-0; 3-0)

#### SOCI 310. (3) Religion in Society

A critical examination of theories and research on the relationship of religion to order, control, conflict and change in various types of society. While the relationship between Christianity and the development of Western societies, including Canada, will be a major focus, oriental and other religions will be considered, including religio-political independence movements in the Third World. (3-0; 3-0)

#### SOCI 315. (3) Class, Status, and Power

An overview of theory and research in the area of social inequality. Focus is on the sources and consequences of the various forms of inequality (e.g., political, social, economic) found in present-day societies. (3-0; 3-0)

#### SOCI 319 (formerly one-half of Sociology 320). (11/2) Industrial Sociology

Man-work linkages; labour force trends; organizational, technological, and work group determinants of industrial behaviour.

Credit cannot be obtained for Sociology 319 (1½ units) and Sociology 320 (3 units). September-December or January-April. (3-0)

## SOCI 321 (formerly 320). (11/2) Sociology of Occupations

Attitudes to work, similarities and differences between occupations; the nature of professions; the contrast between jobs and careers.

Credit cannot be obtained for Sociology 320 (3 units) and Sociology 321 (1½ units). September-December or January-April. (3-0)

## SOCI 325. (3) Small Groups

An introduction to the structural principles of small groups. Discussions of the problems of order in terms of group size, goals, and role allocations. Consideration of both experimental and natural groups. Introduction to the techniques of microsociological research. (2-2; 2-2)

## SOCI 335 (Anthropology 335). (3) Minority and Ethnic Group Relations

Minority and ethnic groups within complex societies with special reference to Canada. (3-0; 3-0)

#### SOCI 340. (1 ½) Demography

Study of the growth, distribution, and movement of human populations with special emphasis on the social causes and consequences.

September-December or January-April. (3-0)

## SOCI 341. (1 1/2) Human Ecology

Study of the form and development of human communities as adaptations to continuously changing conditions of life.

September-December or January-April. (3-0)

#### SOCI 350. (3) Social Welfare as a Social Institution

The historical developments of social welfare as a social institution; the organization of welfare services and the functions they perform in modern society; the relation of social welfare to other institutions. (3-0; 3-0)

#### SOCI 360. (11/2) Sociology of Sport

Conceptual and empirical analyses of the social nature of sport and games. The relation of these phenomena to the sociocultural environment. Analysis of selected sports and games as social systems.

September-December or January-April. (3-0)

#### SOCI 365. (1 1/2) Sociology of Leisure

Conceptual problems in the identification of leisure. The production, consumption and distribution of leisure. The emergence of leisure-defined lifestyles. The study of selected leisure activities.

September-December or January-April. (3-0)

#### SOCI 371 (formerly 370). (1 $\frac{1}{2}$ ) Statistics and Social Research: I

The logic and interpretation of statistical concepts and techniques in the Social Sciences. Basic probability, distributions, sampling, parametric and non-parametric statistics, tests of hypotheses.

Credit cannot be obtained for Sociology 370 (3 units) and Sociology 371 (1½ units). September-December or January-April. (3-0)

### SOCI 372 (formerly 370). (1 1/2) Statistics and Social Research: II

Techniques of multivariate analysis, including correlation and regression.

Credit cannot be obtained for Sociology 370 (3 units) and Sociology 372 ( $1\frac{1}{2}$  units).

Prerequisite: Sociology 371, or consent of Instructor.

January-April only. (3-0)

## SOCI 375 (formerly 430). (3) Introduction to Social Research

Introduction to important concepts and strategies of social research to enable students to evaluate critically the results of published research and begin to carry out research of their own. Current methodological issues, basic steps involved in doing research, research techniques, and theory construction. (3-0; 3-0)

## SOCI 380. (11/2) Sociology of the Life Cycle

A general discussion of the concept of generation. Selected demographic aspects of cultural generations since 1900. The role structure and institutional connections typical of different stages in the individual life cycle.

September-December or January-April. (3-0)

#### SOCI 390. (1 1/2) Selected Problems in Sociology

Presentation of current research interests of various faculty members. Students interested in this course should inquire at Registration when the course is to be offered and what the substantive presentation will involve.

NOTE: Students may enrol in this course in different areas for a maximum of 3 units. (3-0)

## SOCI 401. (11/2) Sociology of Law

The interrelationships of law and other social institutions, socio-economic origins and class interests of legal functionaries, and law as social conflict are analyzed in Canadian and cross-cultural contexts.

September-December or January-April. (3-0)

#### SOCI 415 (formerly 330). (3) Political Sociology

A discussion of conflict and cooption, the distribution of power, voting behaviour, extremist political behaviour, international stratification and political change. (3-0; 3-0)

## SOCI 418 (Anthropology 418). (11/2) Social Change

General theory of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas.

September-December or January-April. (3-0)

#### SOCI 419 (Anthropology 419). (11/2) Modernization and Development

Process of modernization. Industrialization and urbanization in the contemporary world.

September-December or January-April. (3-0)

#### SOCI 420. (11/2, formerly 3) Structure of Formal Organizations

Theories of and methodological problems in the study of organizational structures. Structural dimensions of the division of labour, power, communication, hierarchy, size, technology, and the relationships between organizations will be stressed.

September-December only. (3-0)

# SOCI 421 (formerly one-half of 420). (1 $\frac{1}{2}$ ) Process and Change in Formal Organizations

The first half of the course will cover such topics as norms, values, and roles, including morale, administration, job satisfaction and alienation. The second half will cover organizational change including the evolving types of formal organizations.

January-April only. (3-0)

#### SOCI 441. (11/2) Urban Sociology

This course focuses on the sociological analysis of the city, with specific emphasis on the social aspects of urbanization, urbanism and urban problems. Topical areas include the examination of various urban institutions as well as selected aspects of the urban environment which are seen as important concomitants of urban problems. These include the supposed effects of congestion, housing patterns, social class differentials and their relationship to various problems such as crime, welfare, alcoholism, problems of the aged and a variety of other concerns.

### September-December or January-April. (3-0)

### SOCI 445 (formerly 345). (1 1/2) Sociology of Health and Medicine

Seminar in the social implications of illness, the health professions, systems of health care, epidemiology.

September-December or January-April. (3-0)

#### SOCI 490. (1-3) Directed Studies

This course may be substituted for an elective course in Sociology in the Fourth Year of the Honours Programme with the permission of the Department.

#### SOCI 499. (3) Honours Seminar and Graduating Essay

Honours students are permitted to audit this seminar in the Third Year and are required to take the seminar for credit in the Fourth Year.

### **GRADUATE COURSES**

# **FACULTY OF EDUCATION**

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#### **FACULTY AND OTHER OFFICERS**

- Norma I. Mickelson, B.Ed. (Brit. Col. Vic. Coll.), M.A. (U. of Vic.), Ph.D. (Wash.), Associate Professor, and Acting Dean of the Faculty (1975-76). (On study leave 1976-77.)
- J. Douglas Ayers, B.A., B.Ed. (Brit. Col.), Ph.D. (Tor.), Professor.
- Alex Bavelas, B.S. (Springfield), M.A. (Iowa), Ph.D. (M.I.T.), Professor.
- David J. Chabassol, B.A., B.Ed. (Acadia), M.Ed. (Tor.), Ph.D. (Alta.), Professor.
- Franklin E. Churchley, A.R.C.T., L.R.C.T. (Royal Cons. Mus.), B.Mus. (Tor.), M.A., Ed.D. (Columbia), Professor.
- John A. Downing, B.A., Ph.D. (London), Professor.
- Charles G. Galloway, B.A. (Cent. Wash. Coll. of Ed.), M.A. (Harvard), Ph.D. (Calif.), Professor.

- Arthur Kratzmann, B.Ed. (Sask.), M.Ed. (Alta.), Ph.D. (Chicago), Professor and Chairman, Division of Communication and Social Foundations.
- Geoffrey P. Mason, B.A., M.A. (Brit. Col.), Ph.D. (Wash. St.), Professor.
- Richard H. J. Monk, B.A. (Brit. Col.), M.Ed., Ph.D. (Wash.), Professor.
- K. George Pedersen, B.A. (Brit. Col.), M.A. (Wash.), Ph.D. (Chicago), Professor.
- Robert D. Armstrong, B.Ed., M.A., M.Ed. (Alta.), Ed.D. (Calif.), Associate Professor. (On study leave 1976-77.)
- Harvey O. Bennett, B.Sc., M.Ed., Ph.D. (Ore.), Associate Professor.
- Alan D. Bowd, B.A., Dip.Ed., M.A. (Sydney), Ph.D. (Calgary), Associate Professor.
- Irvin K. Burbank, B.Ed. (Alta.), M.S., Ed.D. (Utah St.), Associate Professor. (On study leave 1976-77.)
- Gerald A. Carr, Dip. P.E. (Loughborough), B.A., M.S. (Calif., Los Angeles), Ph.D. (Stellenbosch), Associate Professor.
- Martin L. Collis, Dip. P.E. (Loughborough), M.S. (Idaho), Ph.D. (Stanford), Associate Professor. (On study leave 1976-77.)
- William K. Cross, B.Ed. (Brit. Col.), M.A., Ed.D. (Wash. St.), Associate Professor.
- Donald R. Daugs, B.S. (Winona St. Coll.), M.S., Ph.D. (Ore. St.), Associate Professor. (On study leave 1976-77.)
- Jean D. Dey, B.Ed., M.Ed. (Alta.), Ed.D. (Calif., Berkeley), Associate Professor.
- John D. Eckerson, B.S., M.A. (Wash.), Ph.D. (Ore.), Associate Professor.
- Peter O. Evanechko, B.Ed., M.Ed., Ph.D. (Alta.), Associate Professor. (On study leave 1976-77.)
- Cary F. Goulson, M.A. (Brit. Col.), Ed.D. (Tor.), Associate Professor and Chairman, Division of Social and Natural Sciences.
- John F. Hall, A.B., A.M. (Stanford), M.S., Ph.D. (Ore. St.), Associate Professor.
- Christopher E. Hodgkinson, B.Sc.Econ. (London), M.Ed., Ed.D. (Brit. Col.), Associate Professor.
- Edgar B. Horne, B.A.Sc., B.A., M.A. (Brit. Col.), Ph.D. (Illinois), Associate Professor.
- Bruce L. Howe, Dip.Ed. (Dunedin Teachers' Coll.), B.S., M.S., Ph.D. (Ore.), Associate Professor and Chairman, Division of Physical Education.
- Terry D. Johnson, B.Ed., M.A., Ed.D. (Brit. Col.), Associate Professor.
- A. Richard King, B.A. (West Wash. Coll. of Ed.), Ph.D. (Stanford), Associate Professor.
- Donald W. Knowles, B.A., B.Ed., M.Ed., Ph.D. (Alta.), Associate Professor, and Associate Dean of the Faculty (1975-76).
- Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (Alta.), Associate Professor.
- Fred L. Martens, B.A., B.Ed. (Brit. Col.), M.S. in P.E. (Wash.), Ph.D. (Ore.), Associate Professor. (On study leave 1976-77.)
- Walter Muir, B.Ed., M.Ed., Ph.D. (Alta.), Associate Professor.
- Lloyd O. Ollila, B.S., M.A., Ph.D. (Minn.), Associate Professor and Graduate Advisor.
- Edward E. Owen, B.A., M.A. (Auckland), Ph.D. (Edin.), Associate Professor.
- R. Vance Peavy, B.A., M.A. (Colo. St. Coll.), D.Ed. (Ore.), Associate Professor.
- Roger A. Ruth, B.S., M.S. (Kansas St. Teacher's Coll.), Ph.D. (Calif., Berkeley), Associate Professor.
- Marion A. Small, B.Ed. (Brit. Col.), M.Ed. (West. Wash. Coll. of Ed.), Associate Professor.
- Hugh Taylor, B.A. (Brit. Col.), M.Ed. (Ore. St.), Ed.D. (Wash. St.), Associate Professor.
- Henry G. Timko, B.S. (Kutztown St. Coll.), M.A., Ed.D. (Ill.), Associate Professor.
- Ronald E. Tinney, B.A. (Brit. Col.), Ph.D. (Minn.), Associate Professor. James H. Vance, B.Sc. (Alta.), M.A. (Wash.), Ph.D. (Alta.), Associate
- Professor.

  Margery M. Vaughan, L.R.S.M. (Royal School of Music), Mus.G. (West. Ont.), B.Mus. (Tor.), M.Litt. (Durham), Ed.D. (Georgia), Associate
- William M. Zuk, B.Ed., B.A., M.Ed. (Alta.), Ph.D. (Ore.), Associate Professor.

- Robert D. Bell, B.A. (P.E.) (Sask.), M.A., Ph.D. (Ore.), Assistant Professor.
- Ian L. Bradley, B.Ed. (Brit. Col.), M.Ed. (West. Wash. St. Coll.), Ed.D. (Brit. Col.), Assistant Professor.
- Rey A. Carr, B.A. (Calif, Los Angeles), M.A. (San Francisco St.), Ph.D. (Calif., Berkeley), Assistant Professor.
- John C. Cawood, B.Ed., M.Ed. (Brit. Col.), Assistant Professor.
- Jerry L. Deffenbacher, B.S. (Wash.), M.A., Ph.D. (Ore.), Assistant Professor.
- David Docherty, B.S., M.S., Ph.D. (Ore.), Assistant Professor.
- W. John Harker, B.A. (Vic. Coll.), M.A. (Wash.), Ed.D. (Brit. Col.), Assistant Professor.
- Maureen C. Hibberson, B.P.E. (Brit. Col.), M.A. (Ore.), Assistant Professor.
- Geoffrey S. Hodder, B.Ed., M.A. (U. of Vic.), Assistant Professor. (On study leave 1976-77.)
- R. Anne McLaughlin, B.Com. (Brit. Col.), M.S. (Ore.), Assistant Professor and Coordinator of Academic Advising (Education).
- Margaret M. Moody, M.Sc., D.Ed. (Ore.), Assistant Professor. (On study leave 1976-77.)
- Antoinette A. Oberg, B.A., M.A. (Wash.), Ph.D. (Alta.), Assistant Pro-
- Leslie H. Peake, Dip. in P.E. (St. Paul's Coll., Bristol), M.Sc. (Springfield Coll.), Assistant Professor.
- Geoffrey D. Potter, B.A., M.A. (Sir George Williams), Assistant Professor.
- Kerry Quorn, B.A. (Whitworth Coll.), M.A. (Guam), Ph.D. (Wash. St.), Assistant Professor.
- John J. Sheppy, B.A., M.Ed. (Brit. Col.), Assistant Professor.
- Peter Shostak, B.Ed., M.Ed., (Alta.), Assistant Professor. (On study leave 1976-77.)
- Jay L. Steele, B.A. (Stanford), M.S., M.F.A., Ph.D. (Ore.), Visiting Assistant Professor (1975-76)
- Robert Swailes, B.S.A. (Man.), M.Ed. (Brit. Col.), Assistant Professor and Assistant Dean of the Faculty.
- Beverly A. Timmons, B.A. (Chico St. Coll.), M.S., D.Ed. (Ore.), Assistant
- Richard L. Williams, B.S. (St. Cloud St. Coll.), M.S. (Cornell), Assistant Professor. (On study leave 1976-77.)
- Larry D. Yore, B.S., M.A., Ph.D. (Minn.), Assistant Professor.
- R. Dale McIntosh, A.R.C.T. (Tor.), B.Ed. (Alta.), M.Ed. (Sask.), M.Mus. (Alta.), Lecturer.
- Arthur Adye, B.Ed. (Brit. Col.), Sessional Lecturer (1975-76).
- Robert N. Arkell, B.A., B.Ed., Hon. B.A., M.Ed. (Sask.), Sessional Lecturer (1975-76).
- Stuart Barber, B.Ed. (Exeter), M.S. (Wash. St.), Sessional Lecturer (1975-76).
- Paul Butterworth, B.Ed., M.A. (U. of Vic.), Sessional Lecturer (1975-76).
- Claude Campbell, B.A. (Mt. Allison), M.Ed. (Brit. Col.), Sessional Lecturer (1975-76 and 1976-77).
- Hetty Clews, B.A.Inter. (London), B.A. (Sask.), Sessional Lecturer (1975-76). B.A. Hons. (Birmingham), M.A.
- John W. Ellis, B.Ed. (West. Wash. St. Coll.), M.Ed. (Minn.), Sessional Lecturer (1975-76).
- Thomas G. A. Fleming, B.A., M.A., Dip.Ed. (U. of Vic.), Sessional Lecturer (1975-76).
- Hermione Frey, B.Ed. (U. of Vic.), M.Ed. (Western Wash. St.), Sessional Lecturer. (1975-76).
- Robert W. Gray, B.A. (Australian Nat. U.), Dip.Ed. (Sydney), M.Ed., Ed.D. (Brit. Col.), Sessional Lecturer (1975-76).
- Geoffrey G. Hett, B.Ed. (U. of Vic.), M.S., Ph.D. (Oregon), Sessional Lecturer (1975-76).
- Thomas Hutchison, M.A., M.Ed. (Glasgow), Sessional Lecturer (1975-76).
- Gloria Mannall-Fretwell, B.Ed., M.Ed. (Alta.), Sessional Lecturer (1975-
- Joy-Nan Marampon, B.Ed. (Brit. Col.), Sessional Lecturer (1975-76).
- Bruce O. Mitchell, B.Ed. (Brit. Col.), Sessional Lecturer (1975-76).
- John C. Oberg, B.A. (Wash.), M.Ed. (Alta.), Sessional Lecturer (1975-76).

- Michael J. Padilla, B.S. (Detroit), M.Ed. (Wayne St.), Ph.D. (Mich. St.) Sessional Lecturer (1975-76).
- Ulah B. Watson, B.Ed. (Brit. Col.), Sessional Lecturer (1975-76).
- David Wolsk, B.A. (Allegheny Coll.), M.A., Ph.D. (Mich.), Part-time Associate Professor (1975-76).
- Larry W. Axmaker, Part-time Sessional Lecturer (1975-76).
- Wilfred C. Barrell, B.Ed. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Shirley A. Bell, B.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- John C. Bergbusch, B.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Don Billsborough, Part-time Sessional Lecturer (1975-76).
- Carl Bjarnason, B.Ed. (Brit. Col.), B.A., M.Ed. (Man.), Ph.D. (Mich.), Part-time Sessional Lecturer (1975-76).
- Ivan Buchanan, Part-time Sessional Lecturer (1975-76).
- John Charnetski, B.Sc., B.Ed. (Alta.), M.F.A. (Wash.), Part-time Sessional Lecturer (1975-76).
- Linda Coombs, B.A. (U. of the Pacific), Part-time Lecturer (1975-76).
- Larry Cross, B.Ed. (U. of Vic.), Part-time Sessional Lecturer (1975-76). Wyn Davies, Part-time Sessional Lecturer (1975-76).
- Patrick A. Drake, B.Sc. (Fort Monmouth), M.Sc. (Indiana), Part-time Sessional Lecturer (1975-76).
- Robin W. Field, B.F.A. (Alta.), M.A. (Sir George Williams), Part-time Sessional Lecturer (1975-76).
- Bernard R. Hambly, B.Ed. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Sharon Henderson, Part-time Sessional Lecturer (1975-76).
- Phyllis Huggett, B.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Joseph W. Lott, B.Comm. (Brit. Col.), M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Bertha Martin, B.Ed., M.A. (San Jose), Part-time Sessional Lecturer (1975-76).
- Winsome Oliver, B.A. (Brit. Col.), Part-time Sessional Lecturer (1975-76).
- Judith Peavy, B.F.A., M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76)
- Glen R. Pope, B.A. (U. of Vic.), M.Ed. (Brit. Col.), Ph.D. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- W. K. Rodney Sample, B.A. (Sask.), Part-time Sessional Lecturer (1975-76).
- Donald M. Sanford, B.A. (Brit. Col.), Part-time Sessional Lecturer (1975-76).
- Linda Schlechte, B.Sc. (Nebraska), M.A. (Calif. St.), Part-time Sessional Lecturer (1975-76).
- Sister Bede Sullivan, A.B. (Mount St. Scholastica Coll.), M.A. (Notre Dame), Part-time Sessional Lecturer (1975-76).
- Gar Taylor, Part-time Sessional Lecturer (1975-76).
- Carla Van Dam, B.A. (Wash.), M.Ed. (N. Texas), Part-tice Sessional Lecturer (1975-76)
- Paul J. Viel, B.A., M.A. (Calif.), Ph.D. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Robert M. Wilson, B.A. (New England, N.S.W.), M.A. (U. of Vic.), Part-time Sessional Lecturer (1975-76).
- Leandre Lacroix, M.C., B.A., B.Phil. (Laval), Administrative Assistant.
- Diana F. McBratney, C.D., Advising Officer.
- Opal Mills, B.A. (Brit. Col.), D.C.S. (Tor.), Senior Academic Assistant, Learning Assistance Centre.
- Richard M. Pearce, B.A. (Brit. Col.), M.S., Ph.D. (Ore. St.), Coordinator of Professional Programmes (Undergraduate).
- John E. Smith, B.A. (Brit. Col.), M.Ed. (Ore.), Coordinator of School Experiences.
- Rosemary E. Webber, B.A. (Brit. Col.), Advising Assistant.

### PROGRAMMES AND DEGREES OFFERED BY THE **FACULTY OF EDUCATION**

The Faculty of Education offers programmes leading to degrees in Education awarded by the University and to teaching certificates issued by the Provincial Department of Education. The following degrees and programmes are offered:

#### A. THE BACHELOR OF EDUCATION DEGREE:

- A1. ELEMENTARY CURRICULUM
  - a. Regular Programme
  - b. Transitional Programme
- A2. SECONDARY CURRICULUM
- B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE
- C. DIPLOMA PROGRAMMES FOR GRADUATES:
  - C1. ELEMENTARY CURRICULUM
  - C2. SECONDARY CURRICULUM
- D. INTERNSHIP PROGRAMMES: (May not be offered 1976-77.)
  - D1. ELEMENTARY CURRICULUM
  - D2. SECONDARY CURRICULUM
- E. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME
- F. GRADUATE STUDIES IN EDUCATION
- G. DIPLOMA PROGRAMME IN NATIVE INDIAN LANGUAGES (NON-CERTIFICATE)

#### ADMISSION TO THE FACULTY OF EDUCATION

Applicants for admission to the Faculty of Education must meet general university requirements specified on pages 8-11, and in addition where applicable, requirements specified under the following section entitled Minimum Requirements for Acceptance into Professional Years.

It may be necessary to restrict admission to the Faculty. Should this become necessary, criteria for admission will be available from the Admis-

sions Office.

The University reserves the right to refuse admission to the Faculty of Education on the grounds of physical handicaps or for other reasons, including unsatisfactory academic records. Admission may also be denied those who are unable to demonstrate good use of English. Applicants for professional programmes whose native tongue is not English may be required to pass oral and written tests in English.

In the event that quotas are placed on any year or programme, not all

qualified applicants will necessarily be accepted for registration.

# MINIMUM REQUIREMENTS FOR ACCEPTANCE INTO PROFESSIONAL YEARS

No registration in any of the Professional Years will be accepted after

September 7, 1976.

Normally the professional year is the third year in the elementary programme and the fifth year in the secondary programme. Diploma programmes follow a degree.

Students on a Bachelor of Education degree programme who are admitted with only minimum requirements to a professional year will not qualify for a teaching credential until further specified work has been completed.

(Refer to teacher certification page 112.)

A candidate who does not fully meet the following requirements for acceptance into a professional year may petition the Faculty of Education Admissions and Adjudication Committee for special consideration of his case.

### A. THE BACHELOR OF EDUCATION DEGREE

#### A1. ELEMENTARY CURRICULUM

(a) Regular Programme.

regular 110gramme.		
Credit in at least 251/2 units that must include:		
Education 2971½	2	units
Education 200	3	units
Core course(s) in art education, music education, or physical education		
English 115, and 121 or 122		
Mathematics 160 or other approved mathematics		
Laboratory science	3	units
Geography 101 (or 200-level laboratory courses taken with permission of the Department of Geography) or History 230 (or other Canadian history with permission of the Education Advising Centre) or An-		
thropology 100	3	units

A G.P.A. of 3.00 in the immediately preceding year (15 units) is required.

(b) Transitional Programme — (Normally for students not previously registered in the Faculty of Education.)

Credit in at least 24 units that must include:

English 115, and 121 or 122; and one of 200, 201, 203, 204, 205, 215, or 238 (equivalent); or other		
approved English		units
Mathematics	3	units
A laboratory science	3	units

Two of:

Geography (must normally include a laboratory) session), History (Canadian content; other only) with permission of Education Advising Centre), Anthropology (100 equivalent).

A G.P.A. of 3.00 (UVic C+) in the immediately preceding year (15 units) is required.

### A2. SECONDARY CURRICULUM

Completion of:

- (a) two teaching areas with a G.P.A. of 3.00 in the senior courses of each (except where fewer than 9 units of senior work is taken in which case the senior-level courses and one or more of the 200-level courses in the area will be included to a total of 9 units); or an expanded teaching area as defined on page 119 with a G.P.A. of 3.00 in the teaching area courses of years Three and Four (minimum 18 units);
- (b) the specified corequisites;
- (c) the courses in Education required in the first four years of the programme.

In addition, a G.P.A. of 3.00 in the immediately preceding two years (30 units) is required.

#### C. DIPLOMA PROGRAMMES FOR GRADUATES

#### C1. ELEMENTARY CURRICULUM

The applicant must possess a degree from a recognized university acceptable in content to the Faculty Admissions Committee with a minimum G.P.A. of 3.00 (UVic C+) in the immediately preceding two years (30 units).

The academic preparation for the Elementary Diploma Programme normally shall include the following:

English	6	units
Mathematics	3	units
Laboratory Science	3	units
Geography (must normally include a laboratory session) or History (Canadian content; other only with permission of the Education Advising Centre)		
or Anthropology (100 equivalent)	3	units

#### C2. SECONDARY CURRICULUM

Students are advised that it is highly desirable to offer two teaching subjects. Those with only one teaching subject may find it difficult to obtain a teaching position. Recommended courses are listed on pages 116-120. Expanded teaching areas are found on page 119.

The applicant must possess a degree from a recognized university acceptable in content to the Faculty Admissions Committee with a minimum G.P.A. of 3.00 (UVic C+) in the immediately preceding two years (30 units) and, effective September 1977, English 115 and 121 or 122 (or their equivalents). The academic preparation must also include one of the following:

- (a) the equivalent of at least 9 units in senior courses in each of two of the following subjects: art, biological sciences\*, chemistry\*, English, French, general science\*, geography\*\*\*, German, history\*\*\*, Latin, mathematics, music\*\*, physical education, physics\*, Russian, Spanish, theatre\*\*\*\*; or with special approval of the Dean, other subject areas normally taught in the secondary schools of British Columbia; with a G.P.A. of 3.00 (UVic C+) on the best 9 units of senior courses in each subject area; or
- (b) a Master's or Honours degree in one of the subjects listed in (a); or
- (c) the equivalent of at least 15 units in senior courses in any one of the subjects listed in (a) with a G.P.A. of 3.00 (UVic C+) in these courses and an additional 9-unit sequence of junior and senior courses in a second teaching subject area; or
- (d) 30 units in an approved expanded teaching area with a grade point average of 3.00.
  - \* All science courses must be acceptable to the Division of Social and Natural Sciences.
  - \*\* Students are strongly urged to include 3 units of Music Education in their undergraduate programmes.
- \*\*\* Students presenting geography must also have at least one appropriate introductory course in history (for example, History 230, 240, or

242); and students presenting history must also have at least one appropriate introductory course in geography (for example, Geography 101, 201, 203, or 205).

\*\*\*\* All Theatre courses must be acceptable to the Chairman of the Division of Communication and Social Foundations.

#### D. INTERNSHIP PROGRAMMES

#### D1. ELEMENTARY CURRICULUM

This programme may not be offered in 1976-77. Admission requirements are under consideration.

#### D2. SECONDARY CURRICULUM

This programme may not be offered in 1976-77. Admission requirements for this programme are identical to those for the Diploma Programme, C2., Secondary Curriculum.

### DIPLOMA PROGRAMME IN NATIVE INDIAN LANGUAGES (non-certificate)

A programme of courses over one academic year will be offered, beginning in September 1974 to prepare individuals to function as consultants, coordinators, or resource aides in the teaching of Native languages in communities or schools of British Columbia. Priority for admission will be given to individuals who are identified by local community organizations which express an interest in developing or continuing native language instruction. Some degree of competence in one of the native languages of British Columbia is a desirable prerequisite but is not absolutely necessary if the student meets other admission criteria and has adequate access to speakers of a native language.

The courses may be taken by an individual for the one-year diploma only or they may be taken as a part of or after completion of a degree programme by students currently enrolled in the University. In cases where the courses are taken as part of a degree programme, they would be

counted as electives only.

Preliminary screening will be made by a committee from the Department of Linguistics and the Faculty of Education which will forward applications and committee recommendations to the Senate Committee on Admission and Re-registration when such action is appropriate. In addition to the usual application form and transcripts for new admissions to the University submitted to the Director of Admission Services (see page 8), each application should include two letters of reference and a letter written by the applicant outlining his personal background and future aspirations.

### GENERAL INFORMATION

### **ACADEMIC ADVICE**

Students wishing advice about any of the undergraduate courses or programmes (including the Diploma programmes) offered in the Faculty of Education should consult the Education Advising Centre, Room 250, Mac-

Laurin Building, or write to that office for information.

All undergraduate students registered in the Faculty are expected to make a commitment to a particular programme. The Education Advising Centre will prepare a Programme Outline for each student based on current Faculty regulations. In preparing the Programme Outline the Advising Centre will consider all previously completed work in relation to the student's choice of programme and teaching areas.

Applicants for admission or acceptance on a degree programme who have completed basic professional training may, at the discretion of the Faculty Admissions and Adjudication Committee, be granted up to 15 units of credit for their basic professional training towards the Bachelor

of Education degree.

Those whose professional training was not completed within the last ten years must submit the following for the Committee's consideration: (1) a resumé of all teaching experience indicating dates, locations, and grade levels; and (2) a copy of the most recent Superintendents' and/or Principals' Reports. The Committee will determine what credit for work already

completed will be applied to the student's chosen programme.

Because of the accelerating rate of change in subject matter, students may not always receive full credit for work taken more than ten years earlier. All Programme Outlines prepared by the Advising Centre will be subject to revision in the light of current requirements if not completed within ten years and may, on occasion, be lengthened. All students are advised to confirm programme requirements with the Advising Centre before they register in any session in order to learn of changes in course numbers and teaching areas.

#### STANDING AND CREDIT

Professional Year. Successful completion of the professional year (including Diploma programme as well as regular and transitional professional years) requires a G.P.A. of 3.00 on all courses taken during that year for the purpose of determining eligibility for a teaching credential.

Post Professional Transfer. Teachers accepted on the Elementary Degree Programme must obtain a G.P.A. of 3.00 on at least 30 units of courses required to complete Years 1-3 in order to establish eligibility for a teaching credential.

Graduation Requirements. Students should refer to the general statements on page 14 of this Calendar. In exceptional cases when teaching areas do not include enough senior courses to satisfy 21 units in the degree, the Dean may approve the inclusion of courses at the 700 level. In addition, to be eligible for the Bachelor of Education degree, the candidate must normally

- (a) a passing grade in each of the courses comprising the degree programme;
- (b) a G.P.A. of 3.00 on the work of the professional year;
- (c) a G.P.A. of 3.00 on the courses of the teaching areas on the elementary programme; or a G.P.A. of 3.00 as specified on page 115 for the teaching areas on the secondary programme;
- (d) a G.P.A. of 3.00 on all work taken subsequent to the professional year. Failed courses will be counted in computing the G.P.A.

Graduating Average. The graduating average of a student graduating from the Faculty of Education shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken at this University and accepted for credit in a degree programme of the Faculty. If the total unit value of all such courses taken does not exceed 30, all such courses will be included in the average. If the total unit value exceeds 30, the average will be taken on a maximum of 30 units of courses, chosen so as to give the highest average but always including courses specified for the degree programme, and where necessary, the appropriate fraction of a course.

Students whose graduating averages are 3.5 or higher will be placed in one of the following classes on the basis of the graduating average:

First Class, an average of 6.5 or higher;

Second Class, an average between 3.5 and 6.49.

**Probation.** A student who meets the University's requirement of a minimum sessional grade point average of 2.0 but whose standing is nevertheless considered by the Faculty to be unsatisfactory, will be placed on probation for the following year. At the end of that year the probationary category may be removed, or if there has been insufficient improvement, the student will not be permitted to proceed to the next higher year. If a student fails to qualify for acceptance into the professional year, a year's extension may be granted to complete these requirements. This year shall be considered probationary. Students who fail to meet the stated requirements shall be denied entry to the professional year and normally shall be required to withdraw from the Faculty.

#### **CREDIT FOR STUDIES UNDERTAKEN AT OTHER INSTITUTIONS**

Students who plan to undertake work at other institutions are required to seek prior approval from the Education Advising Centre if they wish such courses to be credited toward a degree at the University of Victoria.

Students are referred to the general university regulations given on pages 12-15.

#### SCHOOL EXPERIENCE, STUDENT TEACHING AND SEMINARS

School experience, student teaching and seminars form an integral part of the elementary and secondary programmes. Requirements for the elementary programme are outlined in the course descriptions of Education 197, 297 and 797, and for the secondary programme in the course descriptions of Education 398 and 498. It should be noted that material formerly associated with Education 798 is now included in the methodology courses and Education 430.

Students should be aware that all arrangements for school experience and student teaching are made through the seminars and/or the School

Experiences Office which is located in the MacLaurin Building.

Professional year students should note that all elementary and secondary programmes commence with a two-week school experience. Orientation and placement for these activities will take place on Tuesday, September 7. In order to provide for sufficient school placements it will be necessary for each professional year student to apply for school experience on a form provided by the Records Office when authorization for registration has been granted. This application must reach the School Experiences Office by August 13 if a school placement is to be guaranteed. Students will only

be admitted into the professional year programmes after this date if placements can be arranged. However, absolutely no professional year students will be accepted after September 7, 1976.

All Education students undertaking school experience during the year must be prepared to travel to any school in the three greater Victoria school districts. In order to do this, students should budget for an additional \$50.00 to \$100.00 for transportation. Because of the possible heavy use of greater Victoria classrooms for school experience in the fall and winter, students should note that they may be required to undertake the final practicum in selected districts outside School Districts No. 61, 62 and 63.

### TEACHER CERTIFICATION

The University does not issue teaching credentials or establish salary categories. The following is based on current information and Teacher Certification Regulations which came into effect July 1, 1974, and is provided to assist students in securing necessary credentials and evaluation. Specific questions regarding individual certificates, etc., must be directed to the authority concerned. Information regarding policy of the Department of Education of the Province of British Columbia should be secured by contacting the Department.

#### Teaching Credentials

- 1. The Department of Education requires that all persons employed as teachers in the Public Schools of British Columbia have a valid teaching credential.
- Credentials are issued by the Director of Teacher Services, Department of Education, Victoria, B.C.
- 3. Credentials
  - (a) Standard Certificate:

Requires a minimum 3-year approved programme of post-secondary school studies beyond Grade 12, including appropriate teacher education.

(b) Professional Certificate:

Requires a minimum 4-year approved programme of post-secondary school studies beyond Grade 12, including basic teacher education and qualification for a degree.

- 4. Application for a teaching credential must be made to the Director of Teacher Services, Department of Education, Victoria, B.C. The Records Office of the University provides the Department of Education with verification of the applicant's standing, based on completion of the appropriate years of a degree programme or all requirements of the Diploma Programme for Graduates. Obviously in the case of undergraduates such verification can only be provided when the student has registered a degree programme through the appropriate academic advising centre.
- 5. Application Procedure

The procedure to follow varies with the time of the academic year at which the qualification for a certificate is reached.

(a) By attendance at Winter Session:

- In June of each year the Records Office of the University sends a Confidential Annual Report to the Director of Teacher Services, Department of Education, with copies to the District Superintendents of Schools. Unless a student has requested to remain unreported, this includes all regular full-time students of the Faculty of Education who have completed a basic professional year and have registered a degree programme, and reports degree, teaching areas, years completed, and grade results in student teaching. A Supplemental Report, forwarded to the Department of Education only, provides similar information on all part-time students who have completed an additional year of their programmes. An up-to-date transcript for each student is forwarded to the Department with the Reports.
- To secure a first teaching credential on the basis of Winter Session work, the student must apply to the Director of Teacher Services, Department of Education, Victoria, B.C., on a form distributed by the University or available by request from the Department. A copy of birth or baptismal certificate must accompany a first application.
- Students on degree programmes for other than B.Ed. degrees should apply in the same way, but must also request that the Records Office forward a statement of years of degree completed, together with a transcript, to the Department of Educa-
- Application to change to a Professional from a Standard Certificate is to be made to the Department in writing using the application form, or by letter, and following the same procedure.

(b) By May-June studies, by Summer Session or by Supplemental or Deferred Examination:

A Card Application for Teaching Credential should be secured from, completed, and returned to the Records Office of the University. In September the Card is processed and the applicant's standing forwarded with a transcript to the Department of Educa-

- (c) If coursework done with permission elsewhere, reported by official transcript from the other institution to the Records Office, should alter a student's qualification for certification, the Records Office reports this by letter to the Department. The student is responsible for applying in writing to the Department for the change in certifi-
- (d) In all other cases, the student should request the Records Office of the University to report to the Department of Education on the level of degree programme completed, and also should apply to the Department of Education for the appropriate Certificate.
- 6. Except where an expiry date is specified on a credential at the time of issue, any Professional or Standard Certificate is valid for life unless suspended or cancelled for cause. No expiry date shall be specified where within five years of the date of application for initial certification, the applicant has completed an approved teacher preparation programme at a British Columbia post-secondary institution.
- NOTE: Teachers holding Interim Standard or Interim Professional Certificates issued under previous regulations should apply to the Department of Education for a non-expiring credential.

### Teacher Qualification Service Category

Many school boards base salary on Category established by the Teacher Qualification Service of the B.C. School Trustees Association and the B.C. Teachers' Federation. The Service determines this category only upon application by a teacher, and only when a B.C. teaching credential has already been granted by the Department of Education. Categories are assigned on the basis of complete years of professional preparation.

Transcripts and application forms may be obtained from the Records Office of the University. Requests for additional information should be directed to:

Teacher Qualification Service, 220-1070 W. Broadway,

Vancouver, B.C. V5Y 1P6

#### Statement of Degree Completion

On request to the Records Office, a statement verifying the completion of a degree will be provided should this be required in the interval between completion of degree requirements, the granting of the degree, and its entry on official transcripts.

### A. THE BACHELOR OF EDUCATION DEGREE A1. ELEMENTARY CURRICULUM

Candidates for this degree are required to complete a minimum of 75 units; however, the number of units will vary according to the number of units required in their professional year and regulations in effect at the time of their admission. The current regular programme requires 75 units to complete the degree while the transitional programme requires 771/2 units.

In addition to the specified education and core courses, completion of this degree will require specialization in two teaching areas as described on pages 113-115 and selection of either the primary or the intermediate option. When two areas that overlap in content are chosen, a minimum of 18 units in the combined areas will be required. Where the choice of areas involves more than 27 units, the Faculty will reduce the requirements of one area accordingly.

Students on the physical education teaching area, accepted in 1975 and subsequently, will be required to complete 4½ units in addition to their basic degree requirement. A proportion of this requirement will be added to the programmes of students whose degree is presently underway but who

have not completed their activity courses.

The elementary programme is designed to be taken over five regular winter sessions; however, because permanent certification is granted after completion of Year Three, the Faculty attempts to offer as many courses as possible during summer sessions in order to assist those teachers who wish to upgrade their qualifications and obtain their degrees while maintaining their teaching positions.

The transitional programme is a modification of the regular programme, designed especially to accommodate students who attend colleges in the Province for two years before coming to the University to take their professional year. College students should make special note of the courses and G.P.A. required for admission to the transitional professional year as specified on page 110.

TOTAL UNITS

771/2

The third, or professional year is normally taken as a "package"; i.e. all courses listed for that year are taken as a coordinated unit during one full winter session. Admission requirements are specified on page 110. Because of the professional involvement off-campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre. It should be noted that a G.P.A. of 3.00 must be obtained on this year in order to complete the year and qualify for certification.

For graduation requirements, please refer to page 111.

#### COURSE REQUIREMENTS

The degree requires completion of the following or approved substitutes:

#### Regular Programme

Y	ears One and Two			
	Education 197 (Year One)	11/2		
	English 115, and 121 or 122			
	English 200, 201, 203, 204, 205, 215, or 238	3		
	Laboratory science	3		
	Mathematics 160 or other approved mathematics	3		
	Two of:			
	History 230 (or other Canadian history with permission of the Education Advising Centre);			
	Geography 101 (or 200-level laboratory courses taken with permission of the Department of Geography);			
	Anthropology 100	6		
	Approved three units from the following: Art Education 100;			
	Music Education 106 and one of 105, 207, 208, 209;			
	Physical Education 149; or 345 and 446 for students on a physical education teaching	2		

#### Year Three: Professional Year

NOTE: Students registered in a Professional Year are normally not permitted to take courses other than those specified.

other than those specified.	
Education 305	3
Education 337	11/2
Education 742 (Primary or Intermediate)	2
Education 744	11/2
Education 745	1
Education 746	1
Education 797	3
*Two of Education 701, 705 or 706, 747	2 15 units

\*Students are required to complete 1-unit courses in the areas they have not already covered in depth. Students on the Music Education teaching area are advised to register in Education 706 in addition. Students on the Physical Education teaching area who have not completed PE 345/446 are advised to take Education 747 in addition.

#### Years Four and Five

Education 340 (Primary) or			
342 and 343 (Intermediate)	3		
Education 320	11/2		
Education elective	11/2		
Courses in teaching areas and electives	24	30	units
TOTAL	UNITS		75

Transitional Programme: (Normally for students not previously registered in the Faculty of Education; see page 110 for minimum acceptance requirements.)

Years One and Two	
English 115, and 121 or 122 (or equivalent)	3
English 200, 201, 203, 204, 205, 215, or 238	
(or equivalent)	
Mathematics	
Laboratory science	3
Two of:	
Geography (must normally include a labora-	
tory session);	
History (Canadian content; other only with permission of the Education Advising Centre);	
Anthropology 100 (or equivalent)	6
Teaching area or prerequisites, if required; or	0
electives	12 30 units
Year Three: Transitional Professional Year	
Education 200	3
Education 305	3
Education 701	
Education 705 or 706	
Education 742 (Primary or Intermediate)	
Education 744	
Education 745	
Education 746	
Education 747	
Education 797	3 17½ units
Years Four and Five	
Education 337 (required in Year Four)	11/2
Education 340 (Primary) or 342	1/2
and 343 (Intermediate)	3
Education 320	
Education electives	
Courses in teaching areas and electives	
courses in teaching areas and electives	21 JU umts

#### NOTES:

- 1. Mathematics 160 may not be acceptable for credit in the mathematics or mathematics/science teaching areas.
- 2. When choosing electives, students should note the following:
  - (a) English 111 taken after 1 July, 1975 is not acceptable for credit in the Faculty of Education.
  - Psychology 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to Education 305 and 406.
  - (c) Not more than 3 units of additional courses applicable to a student's particular teaching area may be taken without permission of the Advising Centre.
  - (d) General University regulations require a minimum of 21 units of courses numbered 300 or 400.

### TEACHING AREAS (ELEMENTARY)

### ART EDUCATION

Core: Art Education 100 Area: History in Art 120 ...... 3 Art Education 300 ...... 3 Art Education 301 ...... 3 Art Education 302 or Visual Arts elective ....... 3 CREATIVE DRAMA

# EARLY CHILDHOOD EDUCATION (PRIMARY OPTION ONLY)

Education	341			 3
Approved	optio	onal	courses	6

Theatre 181 ...... 3 Two of Theatre 382, 383, 330 ...... 6

The state of Education
One of the following:
Primary Education 440, 342 3
LANGUAGE ARTS
Lingustics 390 3
Either of the following options:
Primary option:
Education 341 3
Education 342 1½
Education 343 1½
3 units from:
Education 344, 347, 348, 442, Theatre 181, 382,
Library Education 432, 433, 434, 435.
Intermediate option:*
English 301 or Education 341 3
Education 347 1½
Education 348 11/2
3 units from:
Education 344, 442, Theatre 181, 382,
Library Education 432, 433, 434, 435
* Education 342 and 343 must be included in the core.
A CONTRACTOR OF THE PROPERTY O
LIBRARY EDUCATION
Library Education 432
Library Education 433
Library Education 434
Education 360
One of Education 341* or English 301 3
Approved optional courses** 1½
* Students on the primary option must take Education 341.  ** Education 342 must be included as part of the degree programme of all
students in this area.  MATHEMATICS EDUCATION
Core: 3 units of approved mathematics chosen from Mathematics 130 (or 100/101); 151/102; 110/210; or other 3 units of Mathematics by special permission.
Area: Education 443
Education 444
Education 484
Approved mathematics
In planning a sequence of courses, students must consider prerequisites. Mathematics 102, 151, 240, 110, 210, and Computing Science 170 and 171 would be an appropriate selection of courses. Students with at least a B standing in Mathematics 12 might consider courses suggested for prospective secondary teachers: Mathematics 130, 110, 210, 362, 366; Computing Science 170, 171; Statistics 253.
The following courses are not acceptable for credit in the Mathematics teaching area or in the core when the teaching area is mathematics: Mathematics 012, 180, 203, 360. Only in exceptional circumstances is Mathematics 160 acceptable for credit in the Mathematics teaching area or in the core.
MATHEMATICS/SCIENCE
Core: Approved mathematics chosen from 151/102; 130 (or 100/101); 110/210 (or 232); or other mathematics courses by special permission.
Approved laboratory science.
Area:
Education 443/444 3
Education 345
Approved mathematics
Education 445 of approved science

The following courses are not acceptable for credit in Mathematics/Science teaching area or in the core when Mathematics/Science is the teaching area: Mathematics 012, 180, 203, 360. In exceptional circumstances Mathematics 160 may be acceptable for credit in the Mathematics/Science teaching area or in the core.

# MUSIC EDUCATION Core: Music Education 106 and one of Music Education 105, 207, 208,

All students accepted in this area will be required to complete one of the following:

(a) one year in a University performance group; or

(b) equivalent participation in an off-campus performance group approved by the Chairman of the Division of Art and Music in Education.

Students wishing to enter the Music Education teaching area must first consult with the Chairman of the Division of Art and Music in Education regarding acceptance. Any student presenting an A.R.C.T. or equivalent diploma will have his diploma evaluated and may be granted up to 6 units of credit at the discretion of the Chairman.

#### OUTDOOR EDUCATION

Education	345	3	
Education	370	3	
	371 or 372		
Approved	optional courses*	6	131/2

\* Students will elect at least six additional units from approved courses in Education, Biology, Geography, Anthropology or History. Selection must include courses in two of these subject areas.

#### PHYSICAL EDUCATION

(Basic degree requirements will be increased by 4½ units for students taking this area)

Core: Physical Education 345, 446.

Area:

Basic skills (chosen from Physical Education 105-124; refer to Notes on page)	6
Physical Education 141	
Physical Education 142	
Physical Education 143	11/2
Approved Physical Education (PE 341, 342, 442 or 445; PE 241; PE 346; PE 461; PE	
	71/2

If a student does not choose PE 344 as one of his electives he will be required to produce a First Aid Certificate dated within two years prior to graduation.

Students who have completed activities under Physical Education 100/

101 are not eligible to repeat such activities for credit.

Entry into the Physical Education teaching area is limited. Students applying for admission or re-registration to the University and who intend to apply for entry into Physical Education must clearly state this intention with their application. They will be sent information from the Admissions or Records Office. The requirements outlined will indicate that transcripts and letters of experience in Physical Education must be submitted to the Physical Education Division by the dates indicated below. Applicants who do not meet the deadline cannot be considered. Application for Admission or Re-registration must be made by the due dates given inside the front cover.

- Transcripts: Transcripts or an official statement of the previous year's
  work must be submitted to the Physical Education Division by June 16.
  A form is available from the Admissions Office. A student who is planning to enter the programme at second year level should supply transcripts for the previous two years.
- Physical Education Experience: Students are required to describe their
  physical education and related experience on a form available from the
  Admissions or Records Office. This form must be submitted to the
  Physical Education Division:
  - (a) by March 31 for presently or previously registered university students and for applicants from the regional colleges;
  - (b) by May 31 for applicants from secondary school.

- 3. Physical Proficiency Test: All students planning to enter the Physical Education teaching area are required to undergo a selection procedure including a physical proficiency test. Testing will take place at the University:
  - (a) in April for university and college applicants;
  - (b) June 16 and 17 for high school applicants.
  - A letter outlining specific testing procedures will be sent to each candidate upon request.
- Acceptance: Successful applicants will receive provisional notification immediately following the testing, subject to medical clearance and satisfatory grade point average.
- 5. Medical: Provisionally accepted candidates must undergo medical examination in the University Student Health Services.

Students are advised to include chemistry and biology in their secondary school programmes. Students who do not have Chemistry 11 and Biology 11 may be denied acceptance into the Physical Education teaching area. Regulation uniforms, which may be obtained at the University Campus

Shop, are required by all students specializing in physical education. Students who fail to qualify for acceptance into this area on first applica-

tion and who intend to re-apply in their second year are warned that Physical Education 149 is not acceptable for credit on a Physical Education teaching area. Any student who has elected to do Physical Education 149 and is then accepted into the Physical Education teaching area cannot count the credit for this course toward his degree.

Completion of a Physical Education teaching area normally requires attendance in at least three regular winter sessions, exclusive of the professional year.

#### REMEDIAL

Education	316	. 11/2	
Education	402	. 11/2	
Education	415	. 3	
Education	417	. 3	
Education	342 and 343*	. 0-3	
Approved	remedial optional courses	. 3-6	 15

\* Education 342 and 343 may not be included if they form part of the core.

Core: A laboratory science chosen from one of the following groups:

- 1. Education 145, Physics, or Chemistry
- 2. Biology or Bacteriology

#### Area:

A laboratory science chosen from the other group above	3
One of Astronomy 120, 200, Geology 200, Geography 203, alternative approved by the Science Education Section	3
Science elective chosen from any subject listed above (except Education 145) or from Edu- cation 345, 370; Biochemistry 300; Chemistry	
301; Geography 372; PE 241; Physics 310; Science 300	3

Students on the four-year Bachelor of Education (Elementary) programme will substitute an elective for Education 345 in Year Four.

#### SOCIAL STUDIES

Education 346	3		
Nine units of approved courses in History, Geography, Anthropology, or other social			
sciences		 12	

Courses must be approved by the Chairman of the Division of Social

Anthropology 100 (or 339), Geography 101, and History 230 must be completed as part of this teaching area if not included in the 6 units anthropology/geography/history requirement for the elementary programme.

### SPECIAL CLASSES

Education	407					11/2	
Education	415					3	
4½ units	cho	sen from	Education	402,	408,		
409A, 40	09C,	409D, 40	)9E, 442			41/2	 9

Education 496 is recommended in addition to the above for students specializing in certain areas. A four-year repeating sequence of special education courses has been prepared. Students wishing to take any special education courses should request the schedule of classes from the Education Advising Centre.

#### ACADEMIC SUBJECT AREAS

With prior approval of the Education Advising Centre, 15 units of a General Programme offered by a department of the Faculty of Arts and Science or a teaching area in Social Science may be acceptable as a teaching area (elementary).

#### SOCIAL SCIENCES

This 15-unit teaching area is intended for students who have specific career teaching aspirations which make it desirable that their first teaching area be supplemented by greater depth of social science knowledge. Generally, the first teaching areas will be social studies, early childhood or special classes, although, with adequate rationale, any other professional area may also be used.

The 15 units may be any combination of courses from Anthropology, Linguistics or Sociology as listed below. This may be a second teaching area for the elementary programme. No courses may be used for application

to both teaching areas.

Students may propose any combinations of the following courses which they consider to be relevant to and consistent with their needs and interests. However, each student will be required to comply with any specific departmental prerequisites or admission standards and to obtain departmental approval in advance for proposed course programmes, and for any changes which may be proposed after initial approval.

Course possibilities include: Anthropology 100, 200, 240, 250, 305, 306, 310, 322, 323, 326, 328, 329, 335, 339, 350, 401, 418, 419, 449; Linguistics 100 or 360, 220, 240, 250, 340, 361, 370, 371, 390, 392, 400, 426, 430; Sociology 200, 305, 310, 321, 335, 340, 360, 365, 380, 418, 419.

#### A2. SECONDARY CURRICULUM

Candidates for this degree are required to complete a minimum of 75 units which will include specialization in one or two teaching subject areas normally taught in the secondary schools of B.C. The teaching areas are described on pages 116-120. With approval of the Faculty Admissions and Adjudication Committee and the Dean of the Faculty, students may be recommended for a degree with a teaching area regularly taught in the B.C. school system but outside of those offered by the Faculty.

Students on the physical education teaching area, accepted in 1975 and subsequently, will be required to complete 4½ units in addition to their basic degree requirement. A proportion of this requirement will be added to the programmes of students whose degree is presently underway but

who have not completed their activity courses.

The programme ordinarily requires attendance at five winter sessions; however, depending upon the choice of teaching area(s), students may transfer into the programme following completion of courses taken at B.C. colleges or elsewhere. Seminars and professional experience are part of the third and fourth years as well as the fifth, or professional year.

The professional year is normally taken as a "package"; i.e. all courses

listed for that year are taken as a coordinated unit during one full winter session. Admission requirements are specified on page 110. Because of the professional involvement off-campus during this year, students are not usually permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre. It should be noted that a G.P.A. of 3.00 must be attained on this year in order to complete the programme and qualify for certification and graduation.

For acceptance into the professional year and for graduation, the teach-

ing area G.P.A. requirement is calculated as follows:

- (a) for students choosing two teaching areas: a G.P.A. of 3.00 must be obtained on the senior courses of each of the two subject areas. All senior courses, both area and additional area, will be included. When fewer than 9 units of senior courses are taken, the calculation will include one or more of the 200-level courses in the area to a total of 9 units.
- (b) for students choosing one expanded teaching area: a G.P.A. of 3.00 must be obtained on all area courses taken in the third and fourth years. If fewer than 18 units of area courses are taken, then the calculation will include sufficient area courses from second year to total 18 units.

For graduation requirements, please refer to page 111.

#### COURSE REQUIREMENTS

	The degree requires successful completion of the following as a n	ninin	num:
a.	Education:	24	units
	Education 303		

#### 116 Programmes, Faculty of Education

Education	320		11/2
Education	337		11/2
Education	398		11/2
Education	406		3
Education	430		11/2
Education	498		11/2
Education	elec	tives	6 or 71/2
Curriculum	n, In	struction, and Practicum 750-770	41/2 or 6

b. Teaching area(s) (including prerequisites and corequisites) 42 units
c. Electives\* 9 units

TOTAL 75 units

- \* When choosing electives students should note the following:
- English 111 taken after 1 July, 1975 is not acceptable for credit in the Faculty of Education.
- Psychology 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to Education 305 and 406.
- General University regulations require a minimum of 21 units of courses numbered 300 or 400.

#### PROGRAMME BY YEARS

Year One:			
English 115, and 121 or 122	3		
Teaching area(s)			
Corequisites and/or electives		15 un	ite
Corequisites and or electives	0	15 411	113
Year Two:			
Teaching area(s)	9		
Corequisites and/or electives	6	15 un	its
Year Three:			
Education 398	11/2		
Education 316, 317, 360, or other			
education elective	11/2		
Education 406	3		
Teaching area(s) and/or electives	9	15 un	its
Year Four:			
Education 498	11/2		
Education 303	11/2		
Teaching area(s) and/or electives	12	15 un	its
Year Five: Professional Year			
Education 337	11/2		
Education 320	11/2		
Education 430	11/2		
Approved Curriculum, Instruction, and Practicum in Secondary School			
Subject(s)			
Education electives	4½-6	15 un	its
Year Five: Alternative Professional Year (Sequential Option)	_		
Two of: Education 753, 755, 758, 767	6		
Education 799A	9	15 un	its
	TOTAL	75 un	its

### PROGRAMME FOR THOSE WHO HAVE COMPLETED PROFESSIONAL TRAINING

Students who have completed two or three years of university study including a professional year at this university or who hold a teaching certificate issued by the Department of Education may transfer to the Bachelor of Education (Secondary Curriculum) programme and complete the degree and requirements for teaching in the secondary schools. The following specific conditions will apply:

- (1) As a minimum the student must meet the unit requirements, teaching area requirements, and G.P.A. requirements as stated in section A2, page 115.
- (2) Education courses will be determined by the Faculty Admissions and Adjudication Committee.

(3) A student will be considered to have met requirements for (a) Year Three when 30 units in addition to the professional year are complete, provided no more than 33 units remain to the degree; and (b) Year Four when 45 units in addition to the professional year (including Education 337) are complete, provided no more than 18 units remain to the degree.

#### TEACHING AREAS (SECONDARY)

Students will choose either two teaching areas from those listed below

or one expanded area from those listed on pages 119-120.

Where two teaching areas are chosen, the minimum required in each area is 15 units. In addition to these 30 units a total of 12 units is required made up of corequisites and additional area courses. Where one expanded area is chosen, 42 units of area and corequisite work is required. Only with prior permission of the Education Advising Centre may exceptions be permitted to any of the following subject and course requirements. The nine units normally reserved for electives may be used to strengthen a teaching area.

#### ART

Corequisites:			
English 115, and 121 or 122	3		
English 200, 201, 203, 215 or 238	3		6
Area:			
History in Art 120	3		
Art Education 100	-		
Art Education 300	3		
Art Education 301	3		
Art Education 400	3	1	5

Additional area courses may be chosen from Art Education 302, 303, 304; or, with prior approval of the Chairman of the Division of Art and Music in Education, from courses in Visual Arts or History in Art.

#### **BIOLOGICAL SCIENCES**

Corequisites:	
Chemistry 124 or 120	3
Chemistry 230 or 233	3
English 115, and 121 or 122	3 9
Area:	
Biology 150*	3
Biology 200	
Two of Biology 203, 204, 206, 207	3
Biology 300 or 320	11/2
**Electives from Biology, Bacteriology,	
Biochemistry, Education 370	4½15

- \*Students excused Biology 150 by the Biology Department (see page 31) will substitute 3 units in Biology or Bacteriology.
- \*\*One botany course must be included in the area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

#### CHEMISTRY

Corequisites:		
English 115, and 121 or 122	3	 3
Area:		
Chemistry 124*	3	
Chemistry 224		
Chemistry 230 or 233		
Approved Chemistry electives		15

\* Students excused Chemistry 124 by the Chemistry Department will substitute 3 units of approved Chemistry.

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### **ENGLISH**

Corequisites:					
Education	342	and	343C	 3	
Linguistics	390			 3	 6

A	rea:								
	English	115,	and	121	or	122	 	 3	
	English	200					 	 3	
	English	215	or 4	00*			 	 . 3	
	English	437 .					 	 3	
	English	396	and	397			 	 . 3	 15

\* English 400 can only be taken in a senior year with permission of the instructor. Additional area courses must be chosen from those numbered 350 or higher but may include English 203 in a 21-unit sequence. No more than two courses in American Literature may be taken in the area. In selecting additional courses students are advised to develop a balanced programme of modern poetry, fiction and drama in preparation for teaching current secondary school curricula.

#### **FRENCH**

Corequisites:		
English 115, and 121 or 122	3	3
Area:		
French 180	3	
French 285	3	
French 290	3	
French 302	3	
French 350*		5
	1 F 1 1'-(	

\* Where a student can demonstrate competence in oral French satisfactory to the instructor in Education 754, 3 units of French numbered 400 or higher may be substituted for French 350.

Additional area courses will be chosen from those numbered 400 or higher.

#### GENERAL SCIENCE

This teaching area is not open to new students.

Students now registered in this area may complete the programme as described on their Programme Outlines.

### GEOGRAPHY

Corequisites:				
English 115, and 121 or 122	3			
History 230, 240 or 242	3	•••••	6	
Area:				
Geography 101	3			
Geography 203	3			
Geography 204	3			
Geography 340 (formerly 305) or 350	3			
Senior Geography	3		15	

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300

One senior course in regional geography is strongly recommended. Students taking 21 units of geography are advised to take both Geography 340 and 350. Students in this area may not elect Geography/Social Science or Social Studies as their second area.

#### GEOGRAPHY/SOCIAL SCIENCE

Corequisites:			
English 115, and 121 or 122	3		
History 230, 240 or 242	3	•••••	6
Area:			
Geography 101	3		
Geography 203	3		
Geography 204	3		
Geography 340 (formerly 305) or 350	3		
Approved courses (minimum of 3 units upper level) in anthropology, classics, economics, history, law, pacific studies, political science,			
sociology	9	• • • • • • • • • • • • • • • • • • • •	21

This is a 21-unit area for students wishing to take courses in geography and the social sciences as one teaching area. Students in this area may not elect Geography or Social Studies as their second area.

#### GERMAN

Corequisites:			
English 115, and 121 or 122	3		
English 200, 201, 204, 205, or 238			6
Area:			
German 100 or 140	. 3		
German 200	. 3		
German 204	. 3		
German 300	. 3		
Senior German (400 or higher)	. 3		15
Additional area courses will be chosen from the	00	numbered 400	0.

Additional area courses will be chosen from those numbered 400 or higher.

#### **GUIDANCE**

This teaching area is not open to new students. Students now registered in this area may complete the programme as described on their Programme Outlines.

Students interested in Guidance and Counselling are directed to the following courses which may be taken as electives: Education 316, 317, 414, 417, 433, 434, 438 (formerly 302)

Corequisites:		
English 115, and 121 or 122	3	
English 200, 201, 204, 205, or 238	3	
Geography 101	3	9
Area:		

Courses in History chosen to meet the following requirements:

- 1. at least 3 units in Canadian History
- 2. at least 3 units in modern European or contemporary world history
- 3. Political Science 100, or 360 and 361
- 4. at least 6 units lower-level

Students in this area may not elect History/History in Art, History/ Social Science, or Social Studies as their second area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

#### HISTORY/HISTORY IN ART

Corequisites: English 115, and 121 or 122	6
Area:	
History courses chosen to meet the following requirements: 9-12	
1. at least 3 units of Canadian History	
<ol><li>at least 3 units of modern European or contemporary world history</li></ol>	
History in Art courses including HA 120 or	

This is a 21-unit area for students wishing to take History and History in Art as one area. Students in this area may not elect History or History/ Social Science as their second area.

#### HISTORY/SOCIAL SCIENCE

Corequisites:		
English 115, and 121 or 122	3	
Geography 101	3	 6
Area: (minimum of 6 units upper level)		
Canadian History	3	
Modern European or contemporary world history		
Political Science 100, or 360 and 361	3	
History elective	3	
Approved courses (including at least 3 units upper level) in anthropology, classics, eco- nomics, geography, law, pacific studies, politi-		
cal science, sociology		 21

This is a 21-unit area for students wishing to take courses in history and the social sciences as one teaching area. Students in this area may not elect History, History/History in Art, or Social Studies as their second area.

INDUSTRIAL EDUCATION
Corequisites:
English 115, and 121 or 122
Courses in Industrial Education will be taken at Burnaby. Students will register for this work in the Faculty of Education at U.B.C. normally in years three and four taking courses specified by that faculty at the time of registration. Letters of Permission must be obtained from the Education Advising Centre to be submitted with applications for admission to U.B.C. Upon completion of these two years, approved credit towards the degree (normally 27 units for technical courses and 3 units in Education) will be transferred to the University of Victoria. Students will return to the University of Victoria to complete requirements for the degree and qualify for certification.
An interview with the Chairman of U.B.C.'s Division of Industrial Education should be arranged during the first year. Interviews can be arranged through the Education Advising Centre.  Candidates for the Industrial Education programme should take Math 11 and Physics or Chemistry at the Grade 11 or 12 level, in addition to their Industrial Education courses.  In years one and two students will select English 115, and 121 or 122, courses and corequisites for the second teaching area, education courses and academic electives. Assistance in choosing appropriate courses should be obtained from the Advising Centre.
LATIN _
Corequisites:  English 115, and 121 or 122
Approved Latin courses (including Latin 240)
MATHEMATICS
Corequisites: English 115, and 121 or 122
Area:  Mathematics 130 (or 100, 101)
MUSIC
Corequisites: English 115, and 121 or 122
Approved Music and/or Music Education 15 Music performance groups (see below) 0-2½
Additional area courses must be approved by the Chairman of the Division of Art and Music in Education.  Students wishing to enter the Music teaching area must first consult with the Chairman regarding acceptance. Any student presenting an A.R.C.T. or equivalent diploma will have his diploma evaluated and may be granted up to 6 units of credit at the discretion of the Chairman.  All students accepted in this area will be required to complete one of the following:
<ul> <li>(a) two years in a University performance group (Music 180 to 481); or</li> <li>(b) one year in each of two University performance groups (as specified in (a) above plus Music Education 300); or</li> </ul>
(c) equivalent participation in an off-campus performance group(s) approved by the Chairman.
OUTDOOR EDUCATION
Corequisites: English 115, and 121 or 122
Biology 150

Area:		
Education 370		
Education 371 or 372	11/2	
Geology 200	3	
Biology 306		11/2
Approved Electives*		
* Approved Electives include:		
Education 371 or 372	Biology 427	Geography 375
Education 414	Biology 428	Geography 376
Education 417	Biology 429	Geography 450
Biology 310	Biology 431	Geography 451
Biology 311	Geography 203	Geography 459
Biology 316	Geography 350	Anthropology 240
Biology 334	Geography 370	Anthropology 401
Biology 406	Geography 371	Physics 310
Biology 408	Geography 372	Chemistry 301
Biology 418	Geography 374	Sociology 341
Biology 426		
PHY	SICAL EDUCATION	

(Basic degree requirements will be increased by 41/2 units for students taking this area.)

Corequisites:

Area:			
Basic Skills (chosen from PE 105-124: see note, page 126)	6		
Physical Education 141	11/2		
Physical Education 142	11/2		
Physical Education 143	11/2		
Physical Education 241	3		
Physical Education 350	11/2		
Physical Education 443	11/2		
Physical Education 450	11/2		
Physical Education 461, 462	11/2		
One of Physical Education 341, 342, 346, 441, 444			21
111	1/2	•••••	41

Additional area courses must be chosen from those courses numbered 300 or higher.

NOTES: 1. If a student does not choose PE 344 as one of his electives he will be required to produce a First Aid certificate dated within two years prior to graduation.

- 2. Students who have completed activities under Physical Educa-tion 100/101 are not eligible to repeat such activities for credit.
- 3. Students who wish to take a stronger concentration in Physical Education are advised to take the following 281/2-unit programme:

Basic Skills (chosen from PE 105-124)	. 6
Physical Education 141	
Physical Education 142	. 11/2
Physical Education 143 Physical Education 241	. 11/2
Physical Education 344	. 11/2
Physical Education 350	. 11/2
Physical Education 442	. 11/2
Physical Education 443	. 11/2
Physical Education 450	
Physical Education 461, 462	. 11/2
Physical Education 343, 371 or 372	
Three of: Physical Education 341, 342 346, 441, 444	, 4½ 28½
DEPEND THE RESERVE THE PARTY OF	

- 4. REFER TO PAGE 114 FOR INFORMATION REGARDING ACCEPTANCE INTO THIS AREA.
- An accelerated programme for the preparation of teachers of girls' physical education is available. This programme allows a student to graduate in three years rather than in five by con-centrated study in May-June, Summer and Winter Sessions.

6. The following areas of emphasis are available:	Area:
Recreation	Theatre 105
Fitness Management	Theatre 181 3
Science of Human Performance	Theatre 312 3
Socio-Cultural Foundations of Physical Education	Theatre 330 3
Teaching and Coaching	Theatre 382
PHYSICS	An additional 9 units of area courses may be elected from any Theatre offerings.
Corequisites:	Note: Students should be aware that the following EXPANDED teaching
English 115, and 121 or 122 3	areas constitute single teaching areas.
Mathematics 130 3	
Mathematics 231 (or 230 and 232) 3-6 9-12	ART (EXPANDED)
Area:	Corequisites:
Physics 101, 211, 212 and 313	English 115, and 121 or 122 3
Approved Physics electives	English 200, 201, 203, or 238
Students are urged to seek advice from the Chairman of the Division of	Area:
Social and Natural Sciences regarding this area.	History in Art 120 3
	Art Education 100 3
RUSSIAN	Art Education 300 3
Corequisites:	Art Education 301 3
English 115, and 121 or 122	Art Education 302 3
Area:	Art Education 303
Russian 100 3	Art Education 304
Russian 200 3	Approved Senior Art or Senior Art History 6
Russian 201	Six units of additional area courses must be taken and must be approved
Russian 302 3	by the Chairman of the Division of Art and Music in Education.
Russian 406	Acceptance into this area is subject to approval of the Chairman. A
Additional area courses will be chosen from the following: Russian 306,	higher G.P.A. than that stated on page 115 of the Calendar may be required for this teaching area.
401, 402, 403, 405.	for this teaching area.
SOCIAL STUDIES	GENERAL SCIENCE (EXPANDED)
Corequisites:	Corequisites:
English 115, and 121 or 122	English 115, and 121 or 122 3
Area:	Mathematics 130
Geography 101	Area:
Geography 203	Astronomy 120 or 200 3
Geography 204	Biology 150 (or 3 units of approved alternative
Canadian History 3	courses for those with Biology 12)
Modern European or contemporary world	Biology 306
history 3	Chemistry 224
Political Science 100, or 360 and 361	Geology 200 or Geography 203
must include at least 3 units upper level)	Physics 101 or 121
Geography 340 (formerly 305) or 350, or	Approved courses selected from the offerings in
upper-level history	astronomy, bacteriology and biochemistry,
This is a 21-unit area for students wishing to take geography and history	biology, chemistry, resource and physical geog- graphy, or physics
as one teaching area. In the professional year students will elect either Education 755 or 758. Students in this area may not elect Geography,	At least one additional course in physics is highly recommended. Credit
History, History/History in Art, Geography/Social Science, or History/	for Mathematics 231 will be included as part of the 101/2 units if an addi-
Social Science as their second area.	tional course in physics is taken.  Six units of additional area courses must be taken and must be approved
SPANISH	by the Chairman of the Division of Social and Natural Sciences.
Corequisites:	GEOGRAPHY/SOCIAL SCIENCE (EXPANDED)
English 115, and 121 or 122	Corequisites:
	English 115, and 121 or 122
Area:	History 230, 240 or 242
Spanish 100         3           Spanish 260         3	Core Area:
Spanish 290	Geography 101
Spanish 302	Geography 203 3
Spanish at the 400 level	Geography 204 3
Additional area courses will be chosen from those numbered 400 or	Geography 340 (formerly 305) or 350 3
higher.	Senior geography 9
	Expanded Area:
THEATRE	Nine units (minimum of 3 units upper level) of approved courses in one of the following
Corequisites:	areas:
English 115, and 121 or 122 3	anthropology, classics, economics, history, paci-
English 200, 201, 203, or 238	fic studies, political science, sociology 9

Additional Area Courses:  Six further units of approved courses in anthropology, classics, economics, history, law, pacific studies, political science, sociology
Expanded area and additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.
HISTORY/SOCIAL SCIENCE (EXPANDED)
Corequisites:       English 115, and 121 or 122
Core Area: (minimum of 9 units upper level) Canadian History
Political Science 100, or 360 and 361
Expanded Area:  Nine units (minimum of 3 units upper level) of approved courses in one of the following areas:  anthropology, classics, economics, geography,
pacific studies, political science, sociology 9  Additional Area Courses:  Six further units of approved courses in anthropology, classics, economics, geography, law, pacific studies, political science, sociology 6
MUSIC (EXPANDED)
Corequisites: English 115, and 121 or 122
Area:  Music 100
SOCIAL STUDIES (EXPANDED)
Corequisites: English 115, and 121 or 122
Area:       Geography 101       3         Geography 203       3         Geography 204       3         Geography 340 (formerly 305) or 350       3         Senior Geography       3         Canadian history       3         Modern European or contemporary       world history         world history       3         Political Science 100 or 360 and 361       3         History electives       6         (Of the 15 units of history/political science, at

Additional	Area	Electives:
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Six further units of approved courses in anthropology, classics, economics, geography, history, law, pacific studies, political science, sociology. (Further courses in geography or history must 

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

#### B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

This programme is being phased out and students will no longer be accepted on it. Teachers who have an official Programme Outline must complete the degree by 1977; otherwise, if they wish to proceed to a degree, it will be necessary to transfer to the five-year Bachelor of Education (Elementary Curriculum) degree programme. In so doing, credit for all courses previously completed cannot be assured.

In this programme students are required to complete only one of the teaching areas listed on pages 113-115 in addition to the education and

core courses as specified in previous calendars.

#### C. DIPLOMA PROGRAMMES FOR GRADUATES

Diploma programmes are one-year professional programmes for graduates of a faculty other than Education who wish to qualify for a credential enabling them to teach in the public schools of British Columbia. Programmes are offered at the elementary and secondary levels.

Admission requirements are detailed on page 110. These programmes

commence with a two-week school experience at the beginning of September and terminate about the middle of May. Successful completion requires a

G.P.A. of 3.00.

Warning: Candidates for the Secondary Programme who have only one teaching subject may find it difficult to obtain a teaching position.

Students who feel they have previously completed courses equivalent to those listed in the programmes below should consult the Education Advising

#### C1. ELEMENTARY CURRICULUM

Education	200	3
Education	320	11/2
Education	337	11/2
Education	360	11/2
	lucation 701, 705 or 706, 747	
	742 (Primary or Intermediate)	
	744	
Education	745	1
Education	746	1
Education	797	3
	C2. SECONDARY CURRICULUM	1
Education	303	11/2
	320	
Education	337	11/2
	406	
Education	430	11/2
	electives	
Education	750 to 770	41/2-6
Education	elective (if required)	1½ 18
OR		
(Sequentia		
Two of:	Education 753, 755, 758, 767	6
	on 799B	

<sup>\*</sup>Students admitted on the basis of two teaching subjects are required to complete two methods courses for 3 units each, while those admitted with one subject will take one methods course for 4½ units plus an additional Education elective for 11/2 units.

### E. POST-BACHELOR OF EDUCATION (ELEMENTARY) **DEGREE PROGRAMME**

Teachers who hold the four-year Bachelor of Education (Elementary) degree may qualify for the Teacher Qualification Service's Category 5 by completing an approved programme consisting of a minimum of 15 units. The courses must be acceptable to the University and to the Teacher Qualification Service.

As this programme must be approved in advance, students should consult the Education Advising Centre prior to beginning any courses of this year.

The programme will include the following in the order given provided they have not been completed as part of the degree:

- (a) Education 337;
- (b) A second teaching area;
- Education 340, or 342 and 343 (to be taken only if necessary to bring total to 15 units);
- (d) Approved upper-level electives (to be taken only if necessary to bring total to 15 units).

Lower level courses required as prerequisites must be taken in addition to the basic 15 units. A minimum G.P.A. of 3.00 is required on the courses of this programme before the Faculty will advise the Teacher Qualification Service that the year has been completed.

#### F. GRADUATE STUDIES IN EDUCATION

The Master of Education, and the Master of Arts and Doctor of Philosophy degrees with specialization in Education are offered through the Faculty of Graduate Studies; information about these degrees may be found on pages 142-144, and 146 of the Calendar. Enquiries concerning Graduate Studies in Education should be directed to the Dean of the Faculty of Graduate Studies or to the Coordinator of Graduate Studies of the Faculty of Education.

#### DIPLOMA PROGRAMME IN NATIVE INDIAN LANGUAGES G. (NON-CERTIFICATE)

All students will register in the same section of the following courses:

Linguistics 220 — Language and Culture

Linguistics 240 — Studies in Indian Languages of B.C.

Linguistics 400 — Field Methods and Techniques in Language Analysis

Linguistics 450 — Seminar in Languages

Linguistics 451 — Seminar in Languages

Education 490 — Principles of Teaching Second Languages

After admission to the programme, orientation, counselling and general University coordination of the programme will be provided by the Studies of Intercultural Education Office of the Faculty of Education. The terminal diploma, to be offered by the Faculty of Education, will carry no connota-"certification" as a professional teacher. It will be relevant solely to functions involved in Native Language instruction.

### COURSES IN THE FACULTY OF EDUCATION

A tentative advance schedule of course offerings for each term is available upon request from the Education Advising Centre after April 1 of each calendar year.

Both core and elective courses included in the professional year and in specialized programmes will be scheduled as part of a programme and may vary from the normal pattern.

Students registering in the professional year will be issued prepared timetables at registration and should therefore not attempt to make up individual timetables.

Courses numbered 300 or above are normally reserved for students

registered in third or following years.

Prerequisites may be waived (a) if the student has completed equivalent work, or (b) in other exceptional cases. Consult the Education Advising

Many Education courses are open to students in other Faculties by permission of the instructor and, where necessary, approval of the Education Advising Centre.

### **UNDERGRADUATE COURSES**

#### **EDUCATION**

#### EDUC 145. (3) General Science

Topics from astronomy, biology, chemistry, geology and physics selected to provide a broad background for the teaching of elementary school sciences. Laboratory exercises will emphasize the process of scientific inquiry. (2-2; 2-2)

NOTE:

Open to students who had biology only or no science in high school, or who have been out of school 6 or more years.

Students who have the following high school courses are not admissible to Education 145. They should take the courses indicated:

Biology and Physics ..... ..... Astronomy 120 or Chemistry 120 or Geography 203

Biology and Chemistry and Physics ..... student's choice or

Astronomy 120 or Geography 203

#### EDUC 197. (11/2) First-Year Elementary Seminar and School Experience

Consists of a weekly seminar and school experience to be arranged throughout the year by the School Experiences Office. A two-week postsession practicum may be required. (Grading: INC; COM, N or F.)

#### EDUC 200. (3) Introduction to Educational Psychology

The application of psychological principles to elementary classroom practice

Credit toward a programme cannot be granted for both Education 200 and 303.

#### EDUC 285. (11/2) Human Life Science

Background in human health specifically related to the elementary Health Education curriculum. Seminars will be oriented toward classroom methodology.

#### EDUC 297. (11/2) Pre-Professional Year Elementary Seminar and School Experience

Weekly seminars dealing with formal analysis of teaching and the acquisition of selected teaching skills, plus a minimum of 20 hours of microteaching. Skills are applied during school experience activities. A two-week postsession practicum may be required. (Grading: INC; COM, N or F.)

### EDUC 303. (1 1/2) Introduction to Psychology of Classroom Learning

An introduction to the psychology of learning in the secondary school. Credit toward a programme cannot be granted for both Education 200 and 303.

### EDUC 305. (3) Psychology of Childhood

Mental, social, emotional and physical characteristics of pre-school and elementary school pupils, their interests and problems; emphasis upon classroom implications.

(3-0; 3-0)Pre- or Corequisite: Professional Year

### EDUC 316. (11/2) Verbal Communication

Study of interpersonal verbal skills and processes. Skill practice and analyzed applications to classroom, counselling, family, social work and mental health. (Not open to students with credit for Education 300.) (3-0)

### EDUC 317. (11/2) Non-verbal Communication

Study of non-verbal interactions: movement, posture, gesture, qualities of voice, and spacing. Analysis of implications in teaching, counselling, family relations, mental health. (Not open to students with credit for Education 300.)

#### EDUC 320. (11/2) Social Issues in Canadian Education

A colloquium to explore salient and current social issues relevant to provision of formal education in Canada.

Prerequisite: Education 797, Education 498, or an approved degree. (3-0)

#### EDUC 337. (11/2) Evaluation of Student Achievement

The construction of classroom measures; including rating scales, selfreports, check lists, performance tests, essay and objective tests, organization and use of measurement data. (Not open to students with credit for Education 401.)

Pre- or Corequisite: Professional year or consent of Education Advising Centre.

### \*EDUC 340. (3) Research and Programme Development in Primary Education

Trends, issues and research in primary education as the basis for curriculum development, organization, and instruction. (3-0; 3-0)

### EDUC 341. (3) Literature in the Elementary School

Survey of children's literature; selection of books for children; scope and sequence in the development of a literature programme in the primary or intermediate grades. Students will specialize according to their option.

Either English 301 or Education 341 may be used for credit in the intermediate Language Arts area. (3-0; 3-0)

### \*\*EDUC 342. (1 1/2) Foundations of Reading

Consideration of the processes and psychology of reading. (3-0)

#### \*\*EDUC 343. (1 1/2) Reading in the School

Components of a total reading programme: examination, evaluation, and construction of instructional materials; curricular organization.

343A - Reading in the Primary Grades

343B - Reading in the Intermediate Grades

343C - Reading in the Secondary Schools

Prerequisite: Education 342.

#### EDUC 344. (11/2) Oral Communication and Speech Development in the Elementary School

Factors influencing communication; improvement of oral facility in teacher and pupil; analysis of English sounds and voice characteristics; early recognition of speech problems; classroom activities for speech development. (3-0)

#### EDUC 345. (3) Selected Topics in General Science

In depth studies of scientific concepts basic to the new elementary school science curricula. (2-2: 2-2)

### \*EDUC 346. (3) Social Studies in the Elementary School

The structural character and implication for teaching of the social studies discipline; principles and practices of direct and indirect teaching; sample and patch studies as advanced organizers of resource materials; unit planning and preparation and the evaluation of procedures.

Enrolment in this course is limited.

(3-0; 3-0)

(3-0)

### \*EDUC 347. (1 1/2) Foundations of Elementary Language

A study of the development, scope and sequence of the language of elementary school children including the nature of the listening, speaking and writing processes. (3-0)

#### \*EDUC 348. (11/2) Language in the Elementary School

The development of curriculum in the elementary school language programme: a study of methods and materials. (3-0)

#### EDUC 360. (11/2) Educational Media

The application of media to education. Communication theory and practical experience in production and utilization of film, photography, audio and video tapes, and classroom audio-visual materials. (3-0)

### EDUC 361. (11/2) Advanced Educational Media

Comprehensive synthesis of audio-visual media, educational television, programmed instruction, and multimedia systems for all levels of education. Laboratory experiences in the operation of complex equipment and the preparation of video tapes, sound slides, learning programmes, and single concept films.

Prerequisite: Education 360.

(3-0)

### EDUC 370. (3) Introduction to Outdoor Education

The major premise upon which this course and its content is based is the belief that there is an urgent need for individuals to re-examine and in many cases look for the first time at the relationship that exists between man and all other living things. Emphasis will be placed on having individuals look critically at the effect man's use of the outdoors has upon the living things he comes in contact with. How can man interact with the outdoors in such a way as to insure its continued existence for use by future generations? By being full participants in many activities it is intended that students will become more aware of the outdoors as well as under-

stand how man can wisely live with his surroundings. Course content will be inter-disciplinary and staffed as such. It is felt that division of content and activities into traditional subject areas is neither possible nor desirable. This course will serve all levels of education students desiring to include the outdoors as part of the learning experience.

(2-2; 2-2)

### EDUC 371. (11/2) Outdoor Recreation - Land Based

Study of the outdoor environment as an educational medium; survey of local outdoor recreational facilities; care and selection of equipment; organization of outdoor programmes and practical laboratory experiences in camping skills and outdoor recreation pursuits. (Not open to students who have credit for Education 371 taken prior to 1976-77.)

Prerequisite: Consent granted through the Advising Centre.

(3.0)

### EDUC 372. (1 1/2) Outdoor Recreation — Water Based

A consideration of the sea and river environments as educational media; a survey of local river and marine recreational areas; care, selection and construction of equipment; organization of outdoor programmes; pool management and practical laboratory experience in water-based outdoor recreational pursuits. (Not open to students who have credit for Education 371 taken prior to 1976-77.)

### EDUC 398. (11/2) Third-Year Secondary Seminar and School Experience

A programme of regularly scheduled seminars in which students will receive some instruction in methodology as preparation for visits to secondary school classrooms. A two-week post-session practicum may be required.

(Grading: INC; COM, N or F.)

### \*EDUC 402. (1 1/2) Individual Testing

Theory and practice in the use of individual tests in education. Students will be required to spend three hours per week in the Learning Assistance Centre diagnosing learning problems.

Prerequisite: Education 301 or 337 or consent granted through the Advising Centre. (0-3)

### EDUC 403. (1½) Social Psychology of School and Classroom

The application of social learning theory to school and classroom management.

Prerequisite: Education 200 or 303.

(3-0)

#### EDUC 406. (3) Psychology of Adolescence

The physiological, psychological, social, and educational aspects of adolescence. (3-0; 3-0)

#### \*EDUC 407. (11/2) The Exceptional Child — Cognitive and Affective Functions

A consideration of children for whom the intellectual demands of the regular classroom are inappropriate—the gifted, the mentally retarded, the culturally disadvantaged, and the emotionally disturbed. Characteristics and programme modifications. This course is prerequisite to Education 409A, 409C, 409D, 409E. (3-0)

### \*EDUC 408. (11/2) The Exceptional Child — Sensory and Motor Functions

A consideration of children whose sensory or motor defects or chronic illnesses render the regular school programme inappropriate — the visually or auditorially handicapped, children with orthopedic defects or chronic illnesses limiting activity, cerebral palsy and other neurological deficits. Characteristics and programme modifications. (3-0)

#### \*EDUC 409A. (11/2) Education of the Exceptional Child — the Gifted

Identification procedures; early school admission and acceleration; setting goals for instruction; effective teaching methods; currently operating programmes.

Prerequisite: Education 407.

(3-0)

(3-0)

### \*EDUC 409C. (1 ½) Education of the Exceptional Child — the Mentally Retarded

Selection procedures; curriculum modifications; effective teaching methods; currently operating programmes; evaluating programme effectiveness.

Prerequisite: Education 407.

\* The professional year is prerequisite to this course.

\*\* The professional year is prerequisite to this course for students on an elementary programme.

#### \*EDUC 409D. (11/2) Education of the Exceptional Child — the Disadvantaged

The effect of cultural disadvantages on school performance; special curricula for the disadvantaged; evaluating the effectiveness of the programme.

Prerequisite: Education 407. (3-0)

### \*EDUC 409E. (11/2) Education of the Exceptional Child — Emotionally Disturbed

Identifying emotionally maladjusted children; school consequences of maladjustment; techniques of therapeutic intervention; psycho-educational programmes; school and community resources.

Prerequisite: Education 407. (3-0)

#### EDUC 414. (3) Group Processes

Analysis of group decision-making; discovery and discussion methods in group learning; study of group interaction in classrooms, family life, counselling, and mental health. First portion of course is devoted to skill development, second part to analysis, theory and research. (3-0; 3-0)

# \*EDUC 415 (formerly 415/416). (3) Diagnosis and Remediation of Learning Difficulties

A consideration of theories and programmes relevant to the causes, correction and remediation of learning difficulties; common tests used in the diagnostic battery, and the interpretation and education implications of test results. Students will be required to spend three hours per week in the Learning Assistance Centre working with children with learning problems. This course is open to students on the elementary programme only.

(3-3; 3-3)

### EDUC 417. (3) Helping Relationships (formerly Introduction to Counselling)

Study of helping relationships in the classroom, counselling, family life, and mental health. Theories of personal effectiveness; analysis and practice of effective relating skills. The course is conducted as a participative seminar and includes skill-building laboratory experience. (3-0; 3-0)

#### EDUC 420. (3) Philosophy of Education

An introductory course dealing with the philosophical foundations of education and their implications for curriculum and instruction in the schools.

Pre- or Corequisite: Professional year. (3-0; 3-0)

#### EDUC 423. (3) History of Education

Development of educational theory and practice from the time of ancient Greece to the present.

Pre- or Corequisite: Professional year. (3-0; 3-0)

### EDUC 425. (3) Anthropology and Education

Theory and perspectives from cultural anthropology relevant to the processes of education and operations of schools. (3-0; 3-0)

#### EDUC 427. (3) Sociology of Education

The social structure of western civilization and its significance for education.

(Offered Summer Session 1977 and alternate summer sessions.)
(3-0; 3-0)

# EDUC 430. (11/2) The Organization and Administration of Education in British Columbia

Introduction to structure and process of the B.C. School System. Teacher-administration relationships. Emerging trends and controversial issues in school organization and practice. Value problems in the profession. School law and legal requirements. Public and professional relationships. Classroom management.

Pre- or Corequisite: Professional year or enrolment in Industrial Education teaching area. (3-0)

### EDUC 431. (11/2) An Introduction to Educational Administration

The meaning and purpose of Educational Administration. Concepts related to the theory, tasks, authority, processes of Educational Administration. The Administrator — characteristics, qualifications, selection, preparation.

Pre- or Corequisite: Professional year. (3-0)

#### EDUC 432. (11/2) Value Education

An examination of the nature of value, the developmental and psychometric aspects of values, and some current practices in value education in schools. (3-0)

### EDUC 433. (1 1/2) Psychological Education

A study of the concepts and practices of psychological education; examines how the school, family and community can mutually support the personal growth of individuals through educational means. (3-0)

#### EDUC 434. (11/2) Human Skills

Topics include: family life, educational principles and practices; vocational decision-making; education for personal development and life skills learning. (3-0)

#### EDUC 435. (1 1/2) Supervision — Setting, Methods and Overview

An examination of leadership, change, authority and power structures and organizational climate in supervision settings. Consideration given to evaluation, motivation, techniques available for the systematic observation and analysis of teaching and supervision of programme development and evaluation.

Prerequisite: Consent of the instructor.

(3-0)

#### EDUC 436. (3) Adult Education: Concepts, Theory and Practice

An identification of the theoretical basis of adult learning behaviour and the characteristics of adult education as a social and institutional practice. Topics include an operational definition of adult education, an historical development of the concept, an analysis of the various roles of persons involved with adult education, a review of the learning patterns of adults, an analysis of particular programme emphases in adult education, and the articulation of selected contemporary issues in the area. The concept of adult education is considered as separate from degree-oriented higher education. (3-0; 3-0)

#### EDUC 437. (11/2) Measurement and Evaluation in Education

Reliability and validity of educational measures; the measurement of aptitudes and affect; diagnostic, formative and summative evaluation; problems and issues in educational evaluation. (Not open to students with credit for Education 401.)

Pre- or Corequisite: Education 337. (3-0)

#### EDUC 438 (formerly 302). (1 1/2) Use of Group Tests

Study of the purposes, uses, administration, scoring, and interpretation, of group tests commonly used in schools. Includes tests of aptitudes, achievement, interests, and personality.

Prerequisite: Consent granted through the Advising Centre. (3

#### EDUC 439. (1 1/2) Introduction to Quantitative Research Methods in Education

An introduction to research design and statistical inference. The major purpose is to prepare teachers to read and interpret the research literature in education.

Prerequisite: Education 337.

Pre- or Corequisite: Education 437. (3-0)

#### \*EDUC 440. (1 1/2) Early Childhood Education

An introduction to the philosophy underlying pre-school education. Current trends, issues, and research related to the developmental needs and behaviours of children under six years of age. (3-0)

### \*EDUC 441. (11/2) Research and Programme Development in Pre-School Education

Trends, issues, and research in pre-school education as a basis for curriculum development, organization, and instruction.

Prerequisite: Education 440. (3-0)

#### \*EDUC 442. (11/2) Corrective Reading Instruction

Classroom diagnosis and treatment of reading difficulties; prevention of reading disabilities; corrective classroom procedures.

Prerequisite: Education 342. (3-0)

### \*EDUC 443. (1 1/2) Mathematics Curriculum in the Elementary School

Goals of mathematics learning; evaluation and use of textbooks, supplementary and enrichment materials, games, concrete aids; individualized, small group, and large group instructional settings; evaluation of learning; current issues and trends.

Prerequisite: Education 744 or Mathematics 203 or equivalent. (3-0)

\* The professional year is prerequisite to this course.

### \*EDUC 444. (11/2) Mathematics Instruction in the Elementary School

Teaching strategies; learning activities; classroom organization; instruction materials, their function and use; laboratory methods.

Prerequisite: Education 744 or Mathematics 203 or equivalent. (3-0)

### \*EDUC 445. (3) Science Education

The nature of scientific inquiry, studies of the research in science teaching, comparative curricula, and contemporary thinking in science education. Laboratory work in the preparation and use of experimental materials.

(Subject to minimum enrolment.)

## EDUC 450. (3) Programme Development in Education

Trends, issues and research in education as the basis for curriculum development, organization, and instruction.

450A — Intermediate

Pre- or Corequisite: Professional year.

(3-0; 3-0)

### EDUC 480. (1 1/2 or 3) Contemporary Issues in Education

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia.

(3-0) or (3-0; 3-0)

#### \*EDUC 484. (1 1/2) The Slow Learner in Mathematics

Possible causes of difficulty; teacher-made diagnostic tasks and tests; published tests; analysis of common errors; lesson plans and strategies; mini case studies. (3-0)

#### EDUC 485. (1 1/2 or 3) Special Topics in General Science

Topics of current interest or concern. With permission may be taken more than once for credit. (2-2) or (2-2; 2-2)

#### EDUC 486. (1 1/2 or 3) Special Topics in Social Studies

Topics of current interest or concern. With permission may be taken more than once for credit. (3-0) or (3-0; 3-0)

### †EDUC 490. (3) Principles of Teaching Second Languages

The application of linguistic principles in teaching second languages including contrastive language analysis, methods, materials; gradation, presentation, repetition, and measurement in lesson development. Attention given to automated language teaching.

Prerequisite: One of Linguistics 100, 210, 360, 390. (3-0: 3-0)

### EDUC 494. (11/2) Directed Studies

Research projects, directed reading, or additional course work in a specified area. All students must obtain written approval from the Education Advising Centre before registering in this course. Permission will not normally be given for more than three units of directed studies courses. The following areas have been approved:

- 494A Art Education
- 494B Helping Professions
- 494C Drama in Education
- 494D Early Childhood Education
- 494E Educational Administration
- 494F Educational Foundations
- 494G Educational Media
- 494H Educational Psychology
- 494J Teaching of English
- 494K Language Arts
- 494L Teaching of a Second Language
- 494M Teaching of Geography
- 494N Teaching of History
- 494P Social Studies
- 494Q Library Education
- 494R Mathematics Education
- 494S Special Classes
- 494T Music Education
- 494U Outdoor Education
- 494V Physical Education
- 494W Remedial
- 494X Science Education
- 494Y Student Teaching
- 494Z Education

#### EDUC 495. (11/2) Directed Studies

(Description as for Education 494)

(3-0)

#### \*EDUC 496. (11/2) Practicum in Specified Areas of Teaching

Supervised practice in teaching kindergarten and/or children who learn inefficiently or ineffectively in regular classroom settings. A post-session practicum in May normally will be required.

496A Teaching the gifted child.

Pre- or corequisite: Education 409A

496B Teaching the kindergarten child

Pre- or corequisite: Education 441

496C Teaching the mentally retarded

Pre- or corequisite: Education 409C

496D Teaching the culturally disadvantaged learner Prerequisite: Education 409D

496E Teaching the emotionally disturbed child

Pre- or corequisite: Education 409E 496F Teaching the child with learning disabilities

Pre- or corequisite: Education 415.

Students anticipating enrolment in Education 496 should make early enquiry to the Education Advising Centre to determine availability of supervisory personnel and school placement. Approval of the Education Advising Centre is required prior to enrolment. In general, course activities require a time commitment of one-half day per week throughout the second term.

#### EDUC 498. (11/2) Fourth-Year Secondary Seminar

A programme of seminars and school experiences prerequisite to the Education 750-770 sequences. A two-week post-session practicum may be required. (Grading: INC; COM, N, or F.)

Prerequisite: Education 398.

#### EDUC 701. (1) Curriculum and Instruction in Art

A study of the curriculum organization and techniques of instruction in elementary art. (2-0; 2-0)

### EDUC 705. (1) Basic Concepts in Music

Introductory course in fundamentals, methods, and materials for elementary classroom teachers. Designed for students with little or no background in music. (1-1; 1-1)

### EDUC 706. (1) Music for Classroom Teachers

Methods, materials, and philosophy of music education for elementary classroom teachers. Designed for students who have had some previous musical experience, for example, private lessons or participation in choirs or bands.

(1-1; 1-1)

#### EDUC 742. (2) Curriculum and Instruction in the Language Arts (Primary or Intermediate Grade Emphasis)

A study of the curriculum organization and techniques and materials of instruction in language arts. (3-0; 3-0)

#### EDUC 744. (11/2) Curriculum and Instruction in Elementary Mathematics

A study of the curriculum organization and techniques of instruction in elementary mathematics. (1-1; 1-1)

#### EDUC 745. (1) Curriculum and Instruction in Elementary Science

A study of the curriculum organization and techniques of instruction in elementary science. (1-2)

### EDUC 746. (1) Curriculum and Instruction in Elementary Social Studies

A study of the curriculum organization and techniques of instruction in elementary social studies (1-2)

### EDUC 747. (1) Curriculum and Instruction in Elementary Physical Education

A study of the curriculum organization and techniques of instruction in elementary physical education. (1-1; 1-1)

- \* The professional year is prerequisite to this course.
- † Approved for elective credit in the Faculty of Arts and Science.

#### EDUC 750-770. Curriculum, Instruction and Practicum in Secondary School Subjects

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre.

A two-week practicum (orientation period) is required at the beginning

of the school year. (Grading: INC; letter grade.)

EDUC 750. (3 or 41/2) Art

EDUC 753. (3 or 41/2) English

EDUC 754. (3-6) Second Language

Students with teaching areas in French, German, Latin, Russian, and Spanish will enrol for this course. Those who present one such teaching area will be credited with 3 units, and two such areas, 6 units.

EDUC 755. (3 or 41/2) Geography

EDUC 757. (3 or 41/2) Guidance

EDUC 758. (3 or 41/2) History

EDUC 761. (3 or 41/2) Mathematics

EDUC 762. (3 or 41/2) Music

EDUC 763. (3) Outdoor Education

EDUC 764. (3 or 41/2) Physical Education

EDUC 767. (3 or 41/2) Theatre

EDUC 768. (3 or 41/2) Commerce

Offered by special permission only.

EDUC 769. (3-6) Science

Students with teaching areas in biology, chemistry, physics, or general science will enrol for this course. Those who present one such teaching area will be credited with 3 units, and two such areas, with 6 units.

EDUC 770. (3 or 41/2) Home Economics

Offered by special permission only.

### EDUC 797. (3) Seminar and Elementary Student Teaching

For students registered in the professional year, elementary programme. Consists of a weekly seminar and school experience to be arranged by the School Experiences Office. Students should note that they will be required of on-campus classes.

September school orientation prior to the start of on-campus classes.

(Grading: INC; letter grade.)

#### EDUC 799A. (9) Integrated Professional Programme (Regular)

Historical and Social Foundations; Administration and Management of Education in B.C.; Measurement and Evaluation; Media Education; Library Education; Directed Media or Library Project.

Grading: INC; letter grade.) (18-0 first term; practicum second term)

### EDUC 799B. (12) Integrated Professional Programme (Diploma)

Historical and Social Foundations; Administration and Management of Education in B.C.; Psychology of Classroom Learning; Psychology of Adolescence; Measurement and Evaluation; Media Education; Library Education; Directed Media or Library Project.

(Grading: INC; letter grade.) (24-0 first term; practicum second term)

#### ART EDUCATION

### A E 100. (3) Introduction to Art Education

A study of the growth and development of Art Education, classroom management, teaching techniques in art as related to elementary and /or secondary level. (3-0; 3-0)

#### A E 300. (3) Two-Dimensional and Graphic Art

Programme planning and laboratory investigation of art media involved in handling painting, design, graphics and other two-dimensional problems at the elementary and/or secondary level.

(3-0; 3-0)Prerequisite: Art Education 100 or Education 701.

#### A E 301. (3) Three-Dimensional Art and Crafts

Teaching methods and techniques involving carving, modelling, constructions, and other three-dimensional problems and crafts related to elementary and/or secondary level.

Prerequisite: Art Education 100 or Education 701. (3-0; 3-0)

#### A E 302. (3) Drawing and Painting in the Classroom

Development of sensory perception; exploration of visual imagery found in both the natural and manmade environment; expression of an emerging personal visual imagery using drawing, painting, and projected light techniques. Emphasis throughout will be on personal experience and expression with qualifying discussion on its application to leadership in art. This may include work with children and a parallel study of the visual development of children.

#### A E 303. (1 1/2 or 3) Ceramics in the Classroom

An introductory course in ceramics for elementary and secondary teachers. Discussion and practice will include all aspects of ceramics as these relate to human development and classroom practice.

Prerequisite: Art Education 100 or Education 701. (3-0) or (3-0; 3-0)

#### A E 304. (1 1/2 or 3) Crafts in the Classroom

An introductory course in crafts for elementary and secondary teachers; a practical investigation of various craft media which can be used in the school system.

Prerequisite: Art Education 100 or Education 701.

 $(1\frac{1}{2}-0; 1\frac{1}{2}-0)$  or (3-0; 3-0)

#### A E 400. (3) Special Study

This will include a study of a particular field of Art Education carried out under the direction of a member of Faculty. A lecture-demonstration study of the growth and development of children in relation to creative expression, including the philosophy of art education.

Prerequisites: Art Education 300 and 301. (3-0; 3-0)

#### LIBRARY EDUCATION

#### LE 432 (formerly one-half of 431). (1 1/2) The School Library and the Teacher

The library as a vital part of the teacher's programme, its philosophy and services. For all teachers — elementary and secondary. (3-0)

#### \*LE 433 (formerly one-half of 431). (1 1/2) The School Librarian

The role of the school librarian, administration of a school library, staffing, supervision.

### \*LE 434 (formerly one-half of 430). (11/2) Elementary School Library Materials

The evaluation, selection and acquisition of learning materials in all media formats, etc.

(Offered in 1976-77 and alternate years.) (3-0)

#### \*LE 435 (formerly one-half of 430). (1 1/2) Cataloguing and Classification for **School Libraries**

The principles and practice of basic classification systems and cataloguing rules applied to the needs of the school library.

(Offered in 1976-77 and alternate years.) (3-0)

#### MUSIC EDUCATION

#### M E 105. (11/2) Music Fundamentals for Classroom Teachers

Introduction to music for schools. This course will normally be followed by Music Education 106 in the second term. (Students with exceptionally strong music backgrounds may not be required to take this course.)

### M E 106. (11/2) Elementary School Music Materials and Activities

Survey of texts and materials for use in the elementary classroom music programme. Use of materials in a sequential programme involving singing,

listening, playing, rhythmic and creative activities.

Students with a considerable music background may be permitted to enter Music Education 106 without the regular Music Education 105 prerequisite.

Co- or Prerequisite: Music Education 105 or equivalent. (3-0)

\* The professional year is prerequisite to this course.

#### M E 207 (formerly 107). (1 $\frac{1}{2}$ ) Educational Materials for Listening

Continuation and development of classroom music activities with special emphasis on listening experiences. (3-0)

#### M E 208 (formerly 108). (11/2) Piano Class for Classroom Teachers

Development of piano keyboard skills useful in classroom music.
(2-2) or (1-1; 1-1) or (1½-0; 1½-0)

#### M E 209. (1 1/2) Creativity in Music Education

The relationship of theories of creative behaviour to classroom music teaching. Seminars and workshops. (3-0)

### M E 300 (formerly 100). (11/2) The Teaching of Choral and Classroom Singing

Materials and rehearsal techniques for use with school choral activities.
(3-0)

### M E 302. (1 1/2) Music in Early Childhood

A survey of developmental implications as they pertain to the musical growth of the young child. Current Music Education methods and materials will be studied, and laboratory experiences will be included. (3-0)

#### M E 304. (11/2) Management of School Bands and Orchestras

Initiating and maintaining instrumental programmes in the schools. Emphasis will be on field experiences. (3-0)

#### M E 306. (11/2) Music Activities in the Elementary School (Advanced)

A study of modern methods, materials, and objectives pertaining to the teaching of music in elementary schools.

Prerequisite: Music Education 106 or other methods course in music.
(3-0)

#### M E 307. (11/2) Music Activities in the Secondary Schools (Advanced)

A study of modern methods, materials, and objectives pertaining to the teaching of music in secondary schools. (3-0)

### M E 308. (1 1/2) Piano Class for Classroom Teachers (Advanced)

Continuation of development of piano keyboard skills useful in classroom music.

Prerequisite: Music Education 208 or equivalent.
(2-2) or (1-1; 1-1) or (1½-0; 1½-0)

#### M E 309. (11/2) Foundations of Music Education

Implications of philosophical, sociological and psychological principles for music education. (3-0)

### M E 400. (3) Special Study in Music Education

An individualized study of a particular field in music education carried out under the direction of a member of Faculty. Regular seminars will be included.

Prerequisite: Music Education 309 or consent granted through the Education Advising Centre. (3-0; 3-0)

#### PHYSICAL EDUCATION

#### PE 105-124. Basic Skills in Physical Education Activities

Students who have completed activities under Physical Education 100/101 are not eligible to repeat such activities for credit.

PE 105. (1/2) Swimming

PE 106. (1/2) Track and Field

PE 107. (1/2) Gymnastics I

PE 108. (1/2) Gymnastics II

PE 109. (1/2) Recreational Dance

PE 110. (1/2) Rhythmics

PE 112. (1/2) Curling and Archery

PE 113. (1/2) Golf and Softball

PE 114. (1/2) Movement Education

PE 115. (1/2) Fitness and Conditioning

PE 116. (1/2) Badminton

PE 117. (1/2) Tennis

PE 118. (1/2) Wrestling

PE 120. (1/2) Basketball

PE 121. (1/2) Soccer

PE 122. (1/2) Volleyball

PE 123. (1/2) Rugby

PE 124. (1/2) Field Hockey

For students accepted on the Physical Education teaching area:

1. Proficiency in skills is required in twelve activities chosen as follows:

#### Elementary Programme

(a) PE 105, 106, 107, 109, 114, 115

(b) PE 112 or PE 113

(c) PE 116 or PE 117

(d) Four activities chosen from PE 108, 110, 118, 120, 121, 122, 123, 124, or choices in (b) and (c) above not taken

(At least one outdoor and one indoor team sport must be included.)

#### Secondary Programme

(a) PE 105, 106, 107, 109, 115

(b) PE 112 or PE 113

(c) PE 116 or PE 117

(d) Five activities chosen from PE 108, 110, 114, 118, 120, 121, 122, 123, 124, or choices in (b) and (c) above not taken

(At least one outdoor and one indoor team sport must be included.)

- Students may challenge activity courses by demonstrating proficiency in a skills test given during the first week of lectures. Credit by course challenge must be arranged as described on page 12.
- 3. Not all activities may be offered every year.
- 4. Maximum credit for activities in a degree programme is 71/2 units.
- 5. Each activity course is scheduled for 24 hours of instruction. Students are expected to complete the required activity courses in the first two years.

NOTE: Priority will be given in these courses to students accepted on a physical education teaching area. Other students must obtain consent of the Chairman of the Division of Physical Education.

### PE 141. (11/2) Introductory Human Anatomy

Lecture and laboratory orientation to human anatomy. Emphasis on the basic anatomical structures used in locomotion and fundamental motor skills. Reference made to the structural components of the circulatory, digestive, excretory and endocrine systems. Labs include examination and dissection of mammalian specimens, and extensive use of human anatomical charts, models and stereoscopic slides. (2-2)

#### PE 142. (11/2) Human Potential

An introduction to the physical, emotional and social aspects of human growth and human interpersonal relationships. (3-0)

#### PE 143. (11/2) Introduction to Physical Education

Orientation to the profession; the aims and objectives of physical educacation, relationship of physical education to education, athletics, health, recreation, and safety education. (3-0)

### PE 149. (3) Physical Education in Elementary Schools

Content of the physical education programme in the elementary school; principles and techniques of instruction; intramural organization. Reasonable performance of skills by the student is required and a percentage of the grade is based on performance.

NOTE: Physical Education 149 is not acceptable for credit on a physical education teaching area. Any student who has elected to do Physical Education 149 and then is accepted into the physical education teaching area cannot count the credit for this course toward his degree. (2-2; 2-2)

#### PE 241. (3) Introductory Human Physiology

Lecture and laboratory orientation to human function. Emphasis on basic bodily processes used in production of energy and homeostasis. Labs include introduction to techniques used to assess status of selected physiological parameters, e.g. nerve conduction, indirect calorimetry, and cardiopulmonary function.

Pre- or Corequisite: Physical Education 141. (2-2; 2-2)

#### PE 341. (11/2) Biomechanics (formerly Kinesiology)

Analysis of human movement and performance. The relationship of the laws of physics concerning motion, force, inertia, levers, etc., to muscular and mechanical analysis of motor skills.

Prerequisite: Physical Education 241. (3-0)

# PE 342. (1½) History of Physical Education (formerly History and Principles of Physical Education)

Interpretative study and analysis of physical education and sport through their historical development; current trends, social and cultural implications; relationship to education. (3-0)

### PE 343. (11/2) Recreation in School and Community

Nature of recreation; its function and scope; school-community administration and programmes; leadership in schools, camps, and communities; inter-relationship of these programmes. (3-0)

#### PE 344. (11/2) Care and Prevention of Athletic Injuries

Training techniques, protective equipment and strapping for the prevention of athletic injuries; emergency procedures and first aid practices for the treatment of athletic injuries; care and re-training of injured areas.

Prerequisite: Physical Education 241. (3-0)

#### PE 345. (11/2) Physical Education in Early Childhood

The development of motor behaviour of children in the pre-school and early school years; activities and designed use of equipment for developing basic motor skills; a study of various curriculum designs for this age group.

Prerequisite: Education 747 or PE 149 or 3 units of PE teaching area. (3-0)

#### PE 346. (11/2) Motor Development and Maturation of Children

Growth and maturational characteristics of elementary children as they relate to motor behaviour. (3-0)

#### PE 347. (11/2) Comparative Physical Education

An in-depth study of physical education and sport systems in selected countries.

Prerequisite: Physical Education 342 or consent of instructor. (3-0)

### PE 350. (1 $\frac{1}{2}$ ) Theory and Techniques of Teaching Skills in Team Games

Methods of teaching softball, basketball, soccer, field hockey, volleyball, rugby.

Prerequisites: Six units of required activities (Physical Education 105-124). (3-0)

#### PE 441. (11/2) Exercise Physiology

The anatomical and physiological adaptation of the human body to exercise and training; the relationship of exercise to hypokinetic diseases; nutrition of the athlete.

Prerequisite: Physical Education 241. (3-0)

#### PE 442. (11/2) Motor Learning

Implications of perceptual-motor development for learning; psychology of motor-skill acquisition. (3-0)

#### PE 443. (11/2) Organization and Administration of Physical Education

Nature and function of administration; management of equipment and facilities; organization and management of programs of physical education and athletics; survey of the organization in Canadian schools.

Prerequisite: 4th year standing or consent granted through the Education Advising Centre. (3-0)

#### PE 444. (11/2) Measurement & Evaluation in Physical Education

Use of tests and measurements in physical education; principles of test construction; test administration and interpretation of results; use of evaluating equipment in a variety of physical education tests.

Prerequisite: 4th year standing or consent granted through the Education Advising Centre. (3-0)

#### PE 445. (11/2) Developmental and Adaptive Physical Education

Methods of identifying and evaluating the atypical child and application of a physical education programme to his needs; case-study techniques, developmental programmes; basic therapeutic exercise techniques. (3-0)

### PE 446. (11/2) Physical Education in the Intermediate Grades

Acquisition of motor skills of children in the Intermediate Grades. Methods of instruction to develop basic motor skills; development of resource units; the role of outdoor education; curriculum construction and organization.

Prerequisite: Education 747 or PE 149 or 3 units of PE teaching area. (3-0)

#### PE 450. (11/2) Theory and Techniques of Teaching Skills in Individual Activities

Methods of teaching minor games, swimming, badminton, tennis, wrestling, dance, track and field, gymnastics.

Prerequisites: Six units of required activities (Physical Education 105-124). (3-0)

#### PE 451. (11/2) Adult Fitness and Exercise Management

A study of the theory and practice of adult physical fitness as it relates to health enhancement and preventive medicine. (3-0)

### PE 461. (3/4) Advanced Skills: Coaching and Officiating

In-depth study of two areas selected by the student. Advanced skill level, knowledge and ability to coach and officiate will be required in the two areas. Electives: badminton, basketball, field hockey, soccer, volleyball, track and field, dance, gymnastics, swimming, softball, tennis, rugby, wrestling.

Prerequisites: Physical Education 100, 101, 151. Candidates are asked to consult the Physical Education Division before registering. (1-0; 1-0)

### PE 462. (3/4) Advanced Skills: Coaching and Officiating

(Course description same as Physical Education 461.) (1-0; 1-0)

#### **GRADUATE COURSES**

Students should consult the Coordinator of Graduate Studies in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student programme needs and the availability of instructors.

### EDUC 500. (1 ½) Learning Principles

A survey of the literature on commonly stated principles of instrumental and classical conditioning, generalization, transfer, and retention.

### EDUC 501. (1 ½) Theory of Measurement

An elaboration of the principles and theories of educational and psychological measurement with particular emphasis on interpretation of test reviews, applications to test development, and the design of research studies.

#### EDUC 502. (1 1/2) Seminar in Educational Evaluation

Advanced topics in educational evaluation including; curriculum evaluation, formative evaluation, teacher evaluation, grading and reporting.

#### EDUC 503. (11/2) Verbal Learning

The application of methodology from verbal learning experiments to investigation of factors influencing learning.

### EDUC 504. (11/2) Psychology of Conceptual Learning

An analysis of the problems, methods, theoretical formulations, and experimental evidence in contemporary concept learning research.

### EDUC 505. (11/2) Basic Concepts in Human Development

A survey of a number of well-known schools and theorists in human development. Topics relating to cognitive, personality, and moral development are stressed. Student needs and interests are important in determining course content.

#### EDUC 506. (11/2) Selected Topics in Human Development

Recent theory and research in a number of specific areas of human development. This course constitutes a closer and more detailed study of certain of the broader areas dealt with in Education 505.

#### EDUC 507. (1 1/2) Psychology of Individual Differences

A focus on intellectual, emotional, physical and cultural differences among individuals. Emphasis is given to how individuals differ, causation theories, and implications for education.

#### EDUC 508. (11/2) Theories of Learning

A survey of psychological interpretations of learning, comparing modern Behaviorist and Cognitive approaches; historical perspective also given.

#### EDUC 509. (11/2) Psychology of Classroom Learning

An in-depth analysis of selected issues in classroom learning. The effects of student and teacher characteristics, pedagogical methodologies, and evaluational strategies on student learning are the major interest areas.

#### EDUC 510. (11/2) Psychology of Group Differences

Analysis of group differences in human abilities including historical background, classification and measurement methodology, correlates and educational implications.

#### EDUC 512. (11/2) Measurement in the Affective Domain

Problems in selecting objectives in the affective domain; constructing instruments to assess interests, attitudes, appreciations and values.

#### EDUC 515. (11/2) Advanced Diagnosis of Learning Disabilities

An individualized course for graduate students specializing in diagnosis. Supervised observation and analysis of the intellectual, emotional, and educational problems of children with learning difficulties.

Prerequisite: Education 402, 415, 416; or consent of instructor.

#### EDUC 516. (11/2) Advanced Remediation of Learning Disabilities

An individualized course for graduate students specializing in the remediation of learning problems associated with physical, language, intellectual, emotional, and perceptual dysfunction. Observation, practice, and seminar discussion will be involved.

Prerequisite: Education 515; or consent of instructor.

#### EDUC 517. (11/2) Practica in Counselling

May be taken in areas listed below to a maximum of 6 units (1½ units each). Prior to registration, a student is required to obtain consent from the instructor of the specific practicum and from the chairman of his or her supervisory committee.

- 517A Pre-practicum in Counselling
- 517B Initial Practicum in Counselling
- 517C Practicum in Child Counselling
- 517D Practicum in Adolescent Counselling
- 517E Practicum in Adult Counselling
- 517F Practicum in Creative Arts Therapy
- 517G Practicum in Community Agency Counselling
- 517H Practicum in Family Counselling

### EDUC 518. (11/2) Seminar in Counselling Psychology

Origin, development and data-bases for counselling. Core elements in counselling. The life cycle, developmental needs and counselling. Contemporary counselling approaches.

#### EDUC 519. (11/2) Advanced Seminars in Counselling Psychology

May be taken in areas listed below to a maximum of 6 units (1½ units each). Prior to registration a student is required to obtain consent from the seminar instructor and from the chairman of his or her supervisory committee.

- 519A School Counselling
- 519B Research in Counselling
- 519C Professional Issues in Counselling
- 519D Creative Arts Therapy

- 519E Behavioral Counselling
- 519F Existential Counselling
- 519G Relationship Counselling
- 519H Vocational and Career Counselling

#### EDUC 520. (3) Seminar in Philosophy of Education

An analysis of the theories of leading contemporary thinkers as they relate to basic values, purposes and problems in public education.

#### EDUC 521. (3) Educational Classics

A study in depth of certain selected "great books" that have had significant influence upon educational thought and practice.

#### EDUC 531. (11/2) Comparative Administration

Comparative study of educational administration and systems in Canada, the Commonwealth, the U.S. and selected foreign countries. Also selected cross-organizational studies in public administration, military, hospital, and commercial administration.

#### EDUC 532. (1 1/2) Administration of the Educational Programme

Examination of practical problem areas in the administration of schools and school programmes. Group processes. Field studies. Supervision and evaluation. Some emphasis on human relations approaches.

#### EDUC 533. (3) Concepts and Theory in Administration

Critical examination of the classical and modern literature in administrative science. The sociology and social psychology of organizations. Approaches to a philosophy of administration and some emphasis on the problem areas of values, decision-making processes, power, authority, leadership, and general systems theory.

#### EDUC 534. (11/2) Educational Finance

A study of the major economic and related social problems which influence the provision of elementary and secondary educational services. Some attention will be given to practical applications of educational finance, but the major emphasis will be upon the conceptual and research base of the economics of education. Topics to be considered will include the overall provision of educational services, economics of education, taxation and governmental structure, teacher supply and demand, educational productivity, and educational planning.

# EDUC 540. (1 ½) Research in Curriculum and Instruction in the Elementary Grades

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level. Students may enrol in more than one of the areas listed below at 1½ units each.

- 540A Language
- 540B Reading
- 540C Social Studies
- 540D Mathematics
- 540E Science
- 540F Physical Education
- 540G Music

### EDUC 541. (11/2) Research in Curriculum and Instruction in the Secondary Grades

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level. Students may enrol in more than one of the areas listed below at 1½ units each.

- 541A English
- 541B Geography
- 541C History
- 541D Mathematics
- 541E Science
- 541F Physical Education
- 541G Music

#### EDUC 542. (3) Processes of Reading

An examination of the acquisition and development of reading, focusing on the cognitive and linguistic processes in the reading act.

#### EDUC 543. (3) Language Processes in the School Curriculum

An intensive examination of the processes through which competence in listening, speaking and writing is developed and of the products which result. The course will include an analysis of language research, methods and materials.

Prerequisite: Education 540A; or consent of instructor.

#### EDUC 551. (11/2) General Music Programmes in the Schools

An examination of the principles and procedures for developing and implementing curricula for General Music classes from the Intermediate grades through the Senior Secondary. Theories of curriculum building will be applied to this specific subject matter.

#### EDUC 556. (1 1/2) Basic Concepts of Curriculum Development

Theory and general background on development of curricula with emphasis on locally developed curricula. Students acquire sufficient background to formulate a proposal for a curriculum development project.

#### EDUC 557. (11/2) Applied Concepts of Curriculum Development

Mechanics of and experience in developing curricula with emphasis on local application.

#### EDUC 558. (1 $\frac{1}{2}$ ) Development and Implementation of the Curriculum in a Specific Area

Application of relevant theories and models to the design and development of school curricula in a specific area. Students may enrol in more than one of the areas listed below at 11/2 units each.

558A Language

558B Reading

558C Social Studies

558D Mathematics

558E Science

558F Physical Education

558G English

558H Geography

558J History

558K Music

### EDUC 560. (1 1/2) Statistical Methods in Education

Probability theory; sampling theory; estimation; tests of hypotheses; the t distribution; analysis of variance; analysis of covariance; nonparametric statistics; introduction to computer applications.

Prerequisite: Education 439 or equivalent. (Offered conjointly with Education 561.)

#### EDUC 561. (11/2) Methods in Educational Research

The role of research in education; selecting the problem; reviewing the literature; research hypotheses; problems in measurement; sources of invalidity; models and designs in research; writing research proposals, communicating the results of research.

Prerequisite: Education 439 or equivalent. (Offered conjointly with Education 560.)

#### EDUC 562. (11/2) Advanced Statistical Methods in Education

Applied multiple linear regression; factor analysis; discriminant function analysis; canonical correlation; multivariate analysis of variance; advanced computer data processing.

Prerequisite: Education 560 or equivalent.

#### EDUC 570. (3) Motor Learning

A review of learning theories and principles as they pertain to the acquisition and retention of motor skills; the neural mechanisms involved in the learning and control of motor patterns; information processing in human performance; detailed study of research on memory, attention, retrieval systems, and movement control.

#### EDUC 572. (3) Advanced Exercise Physiology

A study of the response of the human body to varying forms of exercise stress, using a variety of monitoring techninques. The role of specialized exercise equipment in assisting specific performance enhancement.

#### EDUC 573. (3) Seminar, Selected Topics in Physical Education

Choice of topics would include: Anatomical, physiological, and/or kinesiological bases of physical education; body growth and development; sociological aspects of physical education; philosophies of physical education; current problems in physical education programmes; experimental design and research in physical education; administrative problems in physical education and athletics; mechanical analysis of motor skills. It is not intended that all the above topics would be studied — a selection would be made of the topics to be emphasized.

#### EDUC 590. (credit to be determined) Special Problems

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's degree. The student must obtain consent of the chairman of his or her supervisory committee and the instructor offering the area of individual study prior to registering in Education 590.

590A Art and Music Education

590B Communication and Social Foundations

590C Physical Education

590D Psychological Foundations

590E Social and Natural Sciences

#### EDUC 597. (0) Comprehensive Examination

Comprehensive examination as required for individual Master of Education programmes within the Faculty of Education.

597A Art and Music Education

597B Communication and Social Foundations

597C Physical Education

597D Psychological Foundations

597E Social and Natural Sciences

#### EDUC 598. (credit to be determined) Project

598A Art and Music Education

598B Communication and Social Foundations

598C Physical Education

598D Psychological Foundations

598E Social and Natural Sciences

#### EDUC 599. (credit to be determined) Thesis

599A Art and Music Education

599B Communication and Social Foundations

599C Physical Education

599D Psychological Foundations

599E Social and Natural Sciences

#### EDUC 617. (credit to be determined) Internship in Counselling Psychology

Fieldwork and advanced practical experience under supervision for doctoral candidates specializing in counselling psychology.

#### EDUC 618. (credit to be determined) Doctoral Seminars in Counselling Psychology

The doctoral seminars are organized around professional studies in counselling: counselling theory and techniques; group procedures and processes; areas of critical life choice; professional identification; ethics; and research in counselling. The seminars may be taken in areas A through H by doctoral candidates upon consultation with the student's supervisory committee. The specific content of each area will be designated prior to registration.

### EDUC 690. (credit to be determined) Special Problems

May be offered in Areas A through Z (excluding I and O) for credit toward a doctoral degree. The student must obtain consent of the chairman of his or her supervisory committee and the instructor offering the area of individual study prior to registering in Education 690.

### EDUC 699. (credit to be determined) Ph.D. Dissertation

# **FACULTY OF FINE ARTS**

Peter L. Smith, B.A. (Brit. Col), M.A., Ph.D. (Yale), Dean of the Faculty.

The Faculty of Fine Arts comprises the Departments of History in Art, Music, Theatre, and Visual Arts, and offers courses leading to the degree of Bachelor of Arts, in History in Art; Bachelor of Music; Bachelor of Fine Arts with majors in Theatre and in the Visual Arts; Bachelor of Fine Arts

with a general programme in Visual Arts.

Certain courses in the Faculty of Fine Arts carry unrestricted credit in the Faculty of Arts and Science, and other courses may be chosen in keep-

ing with the free elective regulation of that Faculty.

Students in the Faculty of Education may register for credit in any course offered by the Faculty of Fine Arts, provided that space is available and that they have the prior approval of the Education Advising Centre.

Graduate work is offered in Music and Theatre and History in Art. (See section of calendar on Faculty of Graduate Studies for details of pro-

grammes and degrees).

#### **Qualifications for Admission**

See pages 8-11 inclusive of the calendar. See additional requirements under departmental entries for Music, Theatre, and Visual Arts.

Because of limited space and resources in some programmes, not all qualified candidates can be admitted; early application is therefore highly desirable.

#### **General Regulations**

Calendar regulations governing registration fees, and academic advancement (see pages 11-18), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the departmental offerings.

#### Academic Advice

Students entering the Faculty for the first time should consult departmental offices for advice about course planning. If possible, this should be done before registration.

Questions about academic planning in Fine Arts that do not relate to any specific departmental programme can be referred to the Dean's Office

in MacLaurin 192.

## DEPARTMENT OF HISTORY IN ART

- Alan Gowans, M.A. (Tor.), M.F.A., Ph.D. (Princeton), Professor and Chairman of the Department.
- Siri Gunasinghe, B.A. (Ceylon), D.U. (Paris), Professor. (On study leave 1976-77.)
- Sherwood A. Fehm, Jr., B.A. (Trinity, Hartford), M.A., Ph.D. (Yale), Visiting Associate Professor (1976-77).
- S. Anthony Welch, B.A. (Swarthmore), M.A., Ph.D. (Harvard), Associate Professor.
- Robert Deshman, A.B. (Chicago), M.F.A., Ph.D. (Princeton), Assistant Professor.
- Ida K. Rigby, M.A. (Stanford), Ph.D. (Calif., Berkeley), Assistant Professor.
- P. Richard Stanley-Baker, B.A. (Oxon.), M.F.A. (Princeton), Lecturer.
- Martin J. Segger, B.A., Dip. Ed. (U. of Vic.), M. Phil. (Warburg, London), Part-time Lecturer (1975-76).

Philip R. Ward, F.R.S.A., Part-time Lecturer (1975-76).

### GRADUATE PROGRAMME

For information on the studies leading to the M.A. Degree, see page 150; for graduate courses, see page 134.

### **UNDERGRADUATE PROGRAMMES**

### B.A. Programme in History in Art

The history of art is a specialized branch of historical study, differing from history proper in that, instead of relying primarily on the interpreta-tion of written documents, it interprets architecture, painting, furniture, sculpture and other arts as evidence of how past generations lived and

thought. It follows that history in art is at once a specilized discipline, demanding particular knowledge about historical art as well as ability to read its "language," and the broadest of all humanistic studies; full interpretation of historic art requires study not only of cognate arts such as literature and music and drama, but also of many related disciplines ranging from social sciences to theology and aesthetics. No undergraduate programme could hope to offer an entirely adequate background in all these areas, and students should understand that the B.A. degree in History in Art represents only a sound foundation for further growth toward fuller awareness and deeper understanding of history as revealed in art, towards that "wisdom" which, as T. S. Eliot once declared, "educational institutions cannot teach because it cannot be learnt in the time or wholly in such surroundings, but which they can teach us to desire, which they can teach us how to go about acquiring." Fortunately, because art and architecture in some form surround everyone everywhere, the learning process can and should proceed through life for graduates in this field as in no other, whether or not they go on to formal graduate school.

Within these limitations, however, the Department's Programme of study is intended to make this foundation as broad as feasible, its wide range of electives providing at least an opportunity to sample the scope of possibili-

ties within the discipline.

To graduate as a B.A. majoring in History in Art, students are required to have 21 units (seven courses) in History in Art, plus 39 units (13 courses) of free electives. The department also requires its majors to pass an examination to demonstrate their reading knowledge of a language other than their own. Students are required to pass the language test before the end of their third year as majors. This test will be administered by the department at any time, on the student's request. Should students take formal courses in a foreign language in order to pass this test, two of them (6 units) may count as free electives towards the degree.

An integral part of the History in Art programme will be the John and Katharine Maltwood Memorial Museum at Royal Oak, dedicated to study of the Arts and Crafts movement from William Morris to the 1920's in all countries and media, especially architecture and furniture. With a specialized library and seminar facilities, work in its collections will give students a chance to work directly with materials and have first-hand experience in

the operation of a University museum.

### B.A. Programme in History in the Arts

In addition to the above major programme, there is offered under the department's aegis the following programme of History in the Arts, offering a wider and interdisciplinary approach to the study of history:

- 4 of any courses currently offered by the Department of History in Art
- 4 of any courses currently offered by the Department of Music, in the area of Music History and Musicology
- 4 of any courses currently offered by the Department of Theatre in the area of Theatre History (recommended courses: Theatre 310, 311, 312, 370)
- 2 courses to be chosen among the following: History 238, 240, 400
- 2 courses to be chosen among the following: Classical Studies 100, 340, Liberal Arts 305
- 4 free electives

Language requirement to be in accordance with the History in Art policy.

### **COURSES**

NOTE: Firm decisions on what courses the Department is in a position to offer cannot always be made in time for announcement in the Calendar. Students are therefore advised to check with the Department by 'phone or otherwise before electing senior courses especially.

### \*H A 120. (3) Language of History in Art

A theoretical course designed to provide an introduction to the understanding of art as evidence for history, and to prepare the student for qualified judgment of traditional and contemporary art forms. Preference in registration given to First and Second Year students.

Members of the Department.

(2-0-1; 2-0-1)

### \*H A 221. (3) History of Christianity in Art

A broad survey of the major artistic and architectural monuments of Christianity from the Early Christian works in Southern Europe, North Africa, and the Near East, through the Middle Ages and the Reformation period, to late manifestations in the Baroque & Gothic Revival styles: the works of the missionary expansion in America, Asia, and Africa will also be covered. The material will be considered primarily in its symbolic and iconographic contexts.

(Not offered 1976-77.)

(3-0; 3-0)

\* Approved for elective credit in the Faculty of Arts and Science.

### \*H A 230. (3) Introduction to the History of India in Art

A study of major monuments of art and architecture in the Indian subcontinent from early times to the present day, in the context of historic Indian thought and civilization.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

### H A 260 (formerly 360). (3) Painting and Sculpture in Europe since 1750

A general introduction to European painting and sculpture from 1750 to the present day including a brief survey of related developments in North America since 1945. The course will survey such movements as Neoclassicism, Romanticism, Realism, Impressionism, Cubism, Fauvism, Expressionism, Constructivism, and Surrealism. Lectures combine formal and contextual analysis, with emphasis on cultural context.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0:3-0)

# H A 270 (formerly 430). (3) History of the Far East in Art — China, Japan,

A comprehensive survey of the major art forms of China, Japan, and Korea. Aspects reviewed include — in China, the ancient bronzes, pottery, sculpture, calligraphy, and numerous traditions in painting; in Japan, early artifacts, early sculpture and painting, medieval narrative painting and ink painting, painting traditions of the early modern age and prints; in Korea, wall painting, sculpture, pottery and ink painting. Attention will be directed to various types of methodology, some unique to Far Eastern art, and to individual nation preferences, notably where Chinese culture provides the stimulus for native developments in Japan and Korea.

P. R. Stanley-Baker.

(3-0; 3-0)

#### HA 315. (3) Classical Art of Greece and Rome

A comprehensive introductory survey of the art and architecture of ancient Greece and Rome. The approach will be art-historical rather than archaeological.

R. Deshman.

(3-0; 3-0)

#### HA 325. (3) Medieval History in Art

A comprehensive introductory survey of medieval art and architecture in both Byzantium and the Latin West from c. 200 - c. 1420.

R. Deshman.

(3-0; 3-0)

#### HA 331. (3) Buddhist Art

An intensive study of Buddhist art and architecture as illustrating the major developments in Buddhist thought and its practice in the different schools—Hinayana, Mahayana, Tantra. The course will examine the beginnings of Buddhist art in India and its expansion through South and Southeast Asia and the Far East.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

### \*H A 340. (3) Renaissance and Baroque Art in Western Europe

The evolution of art and architecture as the expression of ideas from ca. 1400-1750, with special emphasis on the art of "Old Masters" such as van Eyck, Ghiberti, Donatello, van der Weyden, Leonardo, Raphael, Michelangelo, Titian, Bernini, Rembrandt, etc. (3-0. 3-0)

#### H A 350. (3) The Art of Egypt and the Ancient Near East

A detailed examination of the art and architecture of Pharaonic Egypt, Mesopotamia, Anatolia, and Iran from 3500 B.C. to the beginning of the Christian era. Through artifacts and texts the course will investigate in detail the influence of social and religious thought upon the arts of these ancient cultures and upon their interrelationships at specific periods.

S. A. Welch.

(3-0; 3-0)

#### \*H A 351. (3) Medieval Islamic Art

An intensive study of the art and architecture of the Islamic World (Spain, North Africa, Egypt), the Near East, Turkey, Iran, and India) from the 7th century to the Mongol Invasions of the Near East in the 13th century. Special attention will be paid to wider cultural problems in the history, philosophy, religion, and literature of the Muslim peoples and to the interrelationships of Islam, Byzantium, and Latin Christendom.

S. A. Welch.

(3-0; 3-0)

#### \*H A 353. (3) Later Islamic Art

An intensive study of the cultures of the great Islamic empires of Turkey, Iran and India from the time of the Mongol invasions in the 13th century to the domination of European powers in the 19th century. The art and architecture of Muslim civilizations in Spain, North Africa, Egypt, the

Near East, and Cenral Asia will also be examined. A major focus of the course will be on parallel developments in the philosophy, religion, literature, and history of the later Islamic world and on the cultural ties between Muslim peoples and the peoples of the Far East and Europe.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

#### HA 362. (3) Western European Art in the 20th Century

A thorough study of European painting and sculpture from 1880 to the present day, concluding with a consideration of post-1945 developments in North America. The course begins with Van Gogh, Gauguin, Cezanne, and Rodin and traces the development and influence of such movements as Cubism, Expressionism, Constructivism, and Surrealism and the careers of individual artists, i.e. Matisse, Picasso, Nolde, Malevich, Kandinsky, Mondrian, and Brancusi. Lectures combine formal and contextual analysis. Assigned readings include H. H. Arnason, History of Modern Art, and H. B. Chipp, Theories of Modern Art (an anthology of primarly source material, i.e. letters, diary entries, and manifestos).

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

#### H A 364. (3) Painting and Sculpture in the United States

A general survey of painting and sculpture in the United States from the colonial period to the present day. The course will survey the work of American artists from the colonial limners through Copley, Cole, Ryder, the Ash Can School, the Armory Show, O'Keefe, and Benton to Abstract Expressionism, Happenings, and Earth Art.

Prescribed reading: Barbara Novak, American Painting of the 19th Century; Barbara Rose, A Critical History and Readings in Art Since 1900.

K. Rigby. (3-0; 3-0)

#### HA 366. (11/2) Introduction to the History of the Cinema: I

A general introduction to the history of film as an art form, including consideration of genres, directors' styles, the influence of film technology, and the relations to other media.

Preference given to third and fourth year students. Enrolment will be restricted.

Prerequisite: History in Art 120 and 362 or permission of the instructor.

Prescribed reading: Richard-Dyer McCann, Film: a Montage of Theories; Daniel Talbot, et., Film: An Anthology; Arthur Knight, The Liveliest Art: A Panoramic History of the Movies; G. Mast and M. Cohen, ed., Film Theory and Criticism: Introductory Reading.

R. Deshman.

September-December only. (1-2-2)

### HA 367. (11/2) Introduction to the History of the Cinema: II

The more specialized examination of selected problems, including especially significant cinema genres, directors, and national styles. Students would normally be expected to have completed HA 366.

Preference given to third and fourth year students. Enrolment will be

Prerequisite: History in Art 120 and 362 or permission of the instructor.

I. K. Rigby.

January-April only. (1-2-2)

### HA 368. (11/2) History of Canadian Art

A survey of Canadian painting and sculpture emphasizing developments in the 19th and 20th centuries. September-December only. (3-0)

#### HA 370. (3) Chinese Art

A study of the rise and development of certain major art forms in China; areas of interest will include: recent developments in sculpture and painting, secular painting and sculpture, pottery, landscape painting and development of literati painting and other schools.

P. R. Stanley-Baker.

(3-0; 3-0)

### \*H A 380. (3) Architecture since 1750

Basic developments in the theory and practice of architecture in Western Europe, Canada and U.S.A. over the last 200 years, with special emphasis on architecture as the expression of social, economic and religious ideas.

(Not offered 1976-77; intend to offer 1977-78.)

(3-0; 3-0)

### HA 382. (11/2) North American Indian Art

An introduction to North American Indian arts and artifacts from prehistoric times to the present day. Relevant material from South American Indian cultures will also be discussed. January-April only. (3-0)

\*Approved for elective credit in the Faculty of Arts and Science.

#### \*H A 390. (3) World History in Art (formerly Language of History in Art)

This course affords an opportunity for Third- or Fourth-Year students to elect a basic survey of history in art on a level appropriate to their maturity. Emphasis will be on history horizontally structured across the world in given epochs, rather than on line-of-progress, using as data arts and artifacts interpreted in terms of social function.

#### H A 420 (formerly 320). (3) Special Studies in Medieval Art

A different aspect or period of medieval art will be selected for study each year. Emphasis will be placed on a detailed study of a limited number of works rather than a general survey.

Prerequisite: Permission of the instructor.

(Not offered 1976-77; intend to offer 1977-78.) (3-0; 3-0)

#### H A 431. (3) Hindu Art

An intensive study of the art and architecture of Hinduism from the beginnings to the 17th century. The course will cover the major monuments of Aihole, Ellora, Mahabalipuram, Khajuraho, Kanchipuram, etc., and the works of the later schools of miniature painting.

(Not offered 1976-77; intend to offer 1977-78.) (3-0; 3-0)

#### H A 440. (3) Italian Renaissance Art

An intensive survey of the painting and sculpture of Italy from 1250 to 1550. Special attention will be given to the major monuments of Florence, Rome, Siena, and Venice. The artistic achievements of these cities will be considered in terms of their historical and religious significance.

#### HA 441. (3) Northern Renaissance

An intensive survey of the painting of Northern Europe from 1300 to 1550. Special attention will be given to the achievements of France, Germany and the Low Countries. The major monuments of these areas will be considered in terms of their historic and religious significance. (If time permits salient sculptors and their accomplishments will also be considered).

#### H A 450. (3) Special Studies in Islamic Art and Civilization

This course will involve intensive study of some special aspect of Islamic civilization. Different material will be offered each year, according to student needs. In past years, this course has centred on the History of Islamic Manuscript Painting (1973-74), the History of the Art and Architecture of Muslim India (1974-75), the History of Persian Painting (1975-76.)

For 1976-77 this course will involve a study of Seven Great Cities of the Muslim World. Chiefly utilizing archaeological, architectural, and artistic evidence, this course will examine the following cities which have figured prominently in Muslim history: Jerusalem, Damascus, Baghdad, Cairo, Istanbul, Isfahan, and Delhi.

Prerequisite: Background in either art history, geography, sociology, or history.

S. A. Welch. (3-0; 3-0)

#### H A 460. (3) Special Studies in 20th Century Art

Intensive study of modern movements (e.g. Cubism, Surrealism, Expressionism) or specific problems (art and politics, critical theory) in 20th century art. Combination of topics will vary.

Prerequisite: History in Art 360 or 362 or 364 or permission of the instructor.

I. K. Rigby. (3-0; 3-0)

#### H A 470. (3) Special Studies in Japanese Painting

A study of aspects of the history of Japanese painting and calligraphy. Focal points include study of the ways in which continental influences are absorbed and transformed in the development of native traditions, consistent aspects of Japanese aesthetics, the close association of literature and painting, social upheavals and the emergence of new pictorial forms. Museum trips scheduled.

Not open to students with credit in History in Art 490C.

P. R. Stanley-Baker. (3-0; 3-0)

#### \*H A 481. (3) History of Architecture in North America

Study of architectural developments in Canada and U.S.A. from the 17th century to the present, with special emphasis on interiors and furniture, and the expression of distinctively North American cultural attitudes.

#### HA 485. (3) Conservation of Antiquities

Care and maintenance of museum materials and/or historic architecture. Causes of damage and decay; museum environment; handling, storage, and preservation; principles of critical examination and historical evaluation; cleaning and repair. Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once. Usually, but not necessarily, involves field work.

This course is given by Mr. Philip Ward, Chief Conservator, British Columbia Provincial Museum. (lecture vs. laboratory hours available).

#### \*H A 490. (3) Directed Studies

This course may be taken more than once, in different fields, at the discretion of the Department.

Members of the Department.

### **GRADUATE COURSES**

#### H A 501. (3) Problems in History of Art History

An examination of how the discipline of art history developed, as shown in changing approaches to diverse classic or standard problems of identity and interpretation over several generations. (3-0; 3-0)

#### H A 503. (3) Special Problems of East-West Relationships

Parallels and contrasts among the arts of Europe, Islam, India, China, Japan, America, etc. in selected epochs of history. (3-0; 3-0)

#### H A 505. (3) Directed Readings

Studies of history in art through selected readings, supervised by the staff.

#### HA 599. (9-15) Thesis

\*Approved for elective credit in the Faculty of Arts and Science.

### DEPARTMENT OF MUSIC

Phillip T. Young, B.A. (Bowdoin), Mus.M. (Yale), Professor and Chairman of the Department.

George W. Corwin, B.S. (Ithaca), M.A., D.M.A. (Rochester), Associate Professor. (On study leave 1976-77.)

Rudolf Komorous, Diploma, State Cons. of Music (Prague), Artist Diplomas, Academy of Musical Arts (Prague), Associate Professor.

Alejandro E. Planchart, B.Mus., M.Mus. (Yale), Ph.D. (Harvard), Visiting Associate Professor (1975-76).

Gerald Stanick, Associate Professor and Instrumental Instructor (violin, viola).

Martin Bartlett, B.A., B.Mus. (Brit. Col.), M.A. (Mills), Assistant Professor.

Richard Ely, B.M. (Montana), M.M. (Illinois), Assistant Professor and Instrumental Instructor (french horn).

Boyde W. Hood, B.M. (Eastman), M.M. (Ball St.), Assistant Professor and Instrumental Instructor (trumpet).

Gordana Lazarevich, Artist and Licentiate Dip. (Tor.), B.Sc., M.Sc. (Juilliard), Ph.D. (Columbia), Assistant Professor.

Michael M. Longton, B.M., M.M. (Brit. Col.), Assistant Professor.

Bruce E. More, B.Mus. (Brit. Col.), M.Mus., M.M.A., D.M.A. (Yale), Assistant Professor.

Erich P. Schwandt, B.A., M.A., Ph.D. (Stanford), Assistant Professor.

Eileen Gibson, B.A. (Calif. St. Coll., Hayward), M.M.A. (Yale), Lecturer and Instrumental Instructor (oboe).

Paul Kling, Visiting Lecturer (1975-76).

Jesse Read, B.Mus. (Jacksonville), M.Mus. (U. of Vic.), Lecturer, Instrumental Instructor (bassoon), and Director, University Concert Band.

John A. Smith, B.A. (Ball State), M.Mus. (U. of Vic.), Lecturer and Instrumental Instructor (percussion).

Murray Adaskin, LL.D. (Lethbridge), D.Mus. (Brandon), Part-time Sessional Lecturer (1975-76).

Thomas G. Eadie, B.M., M.M. (Eastman), Part-time Sessional Lecturer (1975-76).

Dennis Miller, Part-time Lecturer and Instrumental Instructor (tuba) (1975-76).

Edward B. Norman, B.Mus. (Brit. Col.), G.R.S.M., A.R.C.M., L.R.A.M., L.T.C.L. (London), Part-time Sessional Lecturer (1975-76).

Tim Paradise, B.A. (Pomona), M.M. (Yale), Part-time Lecturer and Instrumental Instructor (clarinet) (1975-76).

Lanny Pollet, B.Mus. (Eastman), M.Mus. (U. of Vic.), Part-time Lecturer and Instrumental Instructor (flute) (1975-76).

Elizabeth M. Taylor, A.R.M.C.M. (Manchester), Part-time Sessional Lecturer (1975-76).

#### VICTORIA CONSERVATORY OF MUSIC

Students in the Bachelor of Music programme and in the music teaching area in the Bachelor of Education programme receive their solo performance tuition from the faculty of the Department of Music and the Victoria Conservatory of Music. See page 164.

### FACULTY OF THE VICTORIA CONSERVATORY OF MUSIC

Robin Wood, F.R.A.M., Principal, Victoria Conservatory; piano.

Winifred Wood, A.M.M. (Man.), A.R.C.M., L.R.S.M., A.R.A.M., Registrar, Victoria Conservatory; piano.

Murray Adaskin, LL.D. (Lethbridge), violin.

Aurelle Biggs, A.R.C.T., L.R.C.T., piano.

Kathryn Ely, B.Ed., B.M. (Illinois), harp.

Donald Haig-Robinson, L.R.A.M., A.R.C.M., piano.

Sydney Humphreys, L.R.S.M., A.R.A.M., A.R.C.M., F.R.A.M., violin.

James Hunter, Graduate, Toronto Conservatory, cello.

Selena James, M.Mus. (Manhattan), voice.

Edward Parker, piano.

Noel Smith, A.R.C.M., piano.

Elizabeth Taylor, A.R.M.C.M., voice.

Marjorie Tebo, A.L.C.M., L.R.S.M., piano.

Catherine Young, B.M., M.M. (Eastman), voice.

### **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and Ph.D. degrees, see page 151; for graduate courses, see page 137.

### **UNDERGRADUATE PROGRAMMES**

For students who wish to prepare themselves for careers in music, graduate study, etc., the Department of Music offers majors in Composition and Theory, Music History and Literature, General Programme, and Performance, leading to the degree of Bachelor of Music.

### **GENERAL REQUIREMENTS**

In addition to fulfilling general requirements for the Faculty of Fine Arts, each student seeking admission to the Bachelor of Music programme must achieve satisfactory scores in the Department's aptitude test, audition on his major instrument and be interviewed. Confidential letters of recommendation are also required from two adult musicians who know something of the applicant's musical ability and potential. One's secondary school music teacher and/or private teacher would be logical choices where possible. Each prospective student is urged to make an appointment to visit the Department before June 30 in order to fulfill these requirements. If such a visit is impossible, final acceptance must be delayed until the candidate arrives in September to complete these admission requirements and is then subject to space limitation.

Enrolment in the Bachelor of Music Programme is limited at the present time to approximately 150 students.

#### PROGRAMME OF COURSES

All B.Mus. students regardless of their choice of Major will take a common first-year programme. However, in this first year a limited number of students may take extra units either in performance (Music 145 instead of 140) or in composition (Music 105) with the permission of the Department. The Department requires minimum keyboard skill which, if not achieved by the end of the first year, may require summer study with a teacher of one's choice and subsequent examination by the Department.

Year 1		
Music 100	3	
Music 110	3	
Music 140 or 145	2	or 3
*Music electives	2	or 3
English 111/115 or non-music elective	3	
Non-music elective	3	
	_	
	16	to 18

<sup>\*</sup>Music 180, 181 and/or Music 105.

Students in the General Programme who intend to teach music in the public school system should prepare themselves in a second teaching area. Before entering the fifth professional year in the Faculty of Education a student must have completed a specified number of units in this other academic discipline. (See the Faculty of Education regulations.)

Towards the end of the first year, each student will be expected to declare his choice of major and will be assigned an advisor with whom he will develop a programme of studies related to his needs and abilities.

The following programmes are typical but can be modified in consultation with the departmental chairman.

#### Major in Composition and Theory

*Year 2		*Year 3		*Year 4	
200	3	300	3	400	3
205	3	305	3	405	3
Non-music elective	3	307	3	440	2
240	2	340	2	Music elective	3
350	3	Non-music elective	3	Non-music elective	3
	14		14		14

#### Major in Music History and Literature

*Year 2	*Year 3	Year 3 *Y			
Music History		Music History		400	3
elective	3	elective	3	Music History	
200	3	300	3	elective	3
240	2	340	2	499	3
Non-music elective	3	390	3	440	2
Elective	3	Non-music elective	3	Non-music elective	3
	14		14		14

#### Major in General Programme

*Year 2		*Year 3		*Year 4	
200	3	300	3	400	3
Two of 330-336		356 or 360	3	440	2
series	3	Two of 330-336		Non-music elective	3
240	2	series	3	Two Music electives	6
350	3	340	2		
Non-music elective	3	Non-music elective	3		
	14		14		14

#### Major in Performance

*Year 2		*Year 3		*Year 4		
245	6	345	6	400	3	
200	3	300	3	445	6	
Elective	3	Music History		447	3	
Non-music elective	3	elective	3	Non-music elective	3	
		Non-music elective	3			
			_		_	
	15		15		15	

<sup>\*</sup> In addition to the courses in the programmes outlined above, each B.Mus. student will normally be required to enrol in one of the MUS 180-480 series and one of the MUS 181-481 series in each year.

#### **UNDERGRADUATE COURSES**

Unless indicated otherwise, courses begin in September and end in April.

#### LANGUAGE OF MUSIC

### \*MUS 100. (3) Language of Music: I

A study of the basic materials and organization of music and the development of individual skills, including writing, ear training, sight-reading, and keyboard theory.

Prerequisite: Evidence of music training acceptable to the Department.
(3-2; 3-2)

#### \*MUS 200. (3) Language of Music: II

A study of music from plainsong to the 17th century with emphasis on strict counterpoint. Continued development of ear training, sight singing, and keyboard theory.

Prerequisite: Music 100.

(3-1;3-1)

#### \*MUS 300. (3) Language of Music: III

A study of the music of the 18th and 19th centuries emphasizing the writing and analysis of harmony, counterpoint, and form. Continued development of ear training, sight reading, and keyboard theory.

Prerequisite: Music 200 or consent of the Department.

(3-1; 3-1)

### MUS 303. (3) Music Theory for Music Educators

An intensive survey of the more important harmonic, contrapuntal and formal characteristics of the music from c. 1750 to c. 1930, with related studies in sight-singing, ear-training and keyboard harmony. This course is intended for students in the second year of the Master of Education in Music Education programme but is open to others by permission of the department. Not available for credit in the B.Mus. programme.

Prerequisites: Permission of the department.

A working knowledge of traditional harmony is expected.

(Offered in Summer Session only.)

(3-0; 3-0)

(3-0; 3-0)

#### \*MUS 400. (3) Language of Music: IV

Theory, techniques, and practice of twentieth-century music.

Prerequisite: Music 300 or consent of the Department.

#### COMPOSITION

#### MUS 105. (2) Introduction to Composition

Prerequisite: Permission of Instructor.

(2-0; 2-0)

#### MUS 106. (3) Seminar in Sound

Experiments in musical expression, intended to free and strengthen the participants' creative powers. Members of the class will create, perform, and then critically evaluate their work.

(2-1; 2-1)

### MUS 205. (3) Music Composition: I

Prerequisite: Permission of Instructor.

(2-1; 2-1)

#### MUS 305. (3) Music Composition: II

Prerequisite: Music 205.

(2-1; 2-1)

### MUS 307. (2) Electronic Music

Study of electronic music. Practical experience in the electronic studio.

Prerequisite: Music 205 or permission of the instructor. (0-2; 0-2)

### MUS 405. (3) Music Composition: III

Prerequisite: Music 305.

(2-1; 2-1)

### MUSIC HISTORY AND LITERATURE

### \*MUS 110. (3) Introduction to Music History and Literature

A survey of music literature in the changing cultural patterns of Western civilization from antiquity to the present day. Intended for students with some elementary knowledge of notation.

(4-0; 4-0)

#### \*MUS 115. (3) The Elements of Music

A study of the technical, historical, and aesthetic materials necessary to the critical evaluation of music. Primarily intended for the non-musician. Not open to B.Mus. students.

(3-0; 3-0)

### \*MUS 311. (3) Music of the Medieval Period and the Renaissance

A study of music from the beginning of Christianity to c.1600.

Prerequisite: Music 110. (3-0; 3-0)

#### \*MUS 312. (3) Music of the Baroque Era

A study of music from c.1600 - c.1750.

Prerequisite: Music 110. (3-0; 3-0)

#### \*MUS 313. (3) Music from c.1730 to the Late 19th Century

Prerequisite: Music 110. Not open for credit to those who have taken Music 314. (3-0; 3-0)

### \*MUS 320. (3) World Music

An introduction to the study of music of Asia, Africa, and aboriginal America, and the relationship of this music to the western tradition.

Prerequisite: Music 110 or the permission of the instructor. (3-0; 3-0

#### MUS 390. (3) Special Studies

With the consent of the Department, a student who has demonstrated a capacity for independent work may undertake an individual project.

Prerequisite: Music 110. (3-0; 3-0)

#### MUS 490. (3) Special Studies

With the consent of the Department, a student who has demonstrated a capacity for independent work may undertake an individual project.

Prerequisite: Music 110. (3-0; 3-0)

#### MUS 499 (formerly 426). (3) Seminar in Musicology

For Music History majors only. Seminar will include the graduating essay.
(3-0; 3-0)

### INSTRUMENTAL AND CHORAL TECHNIQUES

#### MUS 330. (1 1/2) Strings

Group instruction in playing all orchestral string instruments.

One term only. To be announced. (2-2)

### MUS 331. (11/2) Brasses

Group instruction in playing all orchestral brass instruments.

One term only. To be announced. (2-2)

### MUS 332. (1 1/2) Woodwinds

Group instruction in playing all orchestral woodwind instruments.

One term only. To be announced. (2-2)

### MUS 333. (1 1/2) Percussion

Group instruction in playing all orchestral percussion.

One term only. To be announced. (2-2)

#### MUS 334. (11/2) Voice

Group instruction in vocal production
One term only. To be announced. (2-2)

### MUS 336. (11/2) Keyboard

Group instruction in piano, harpsichord, and/or organ.

One term only. To be announced. (2-2)

#### MUS 350 (formerly 335). (3) Orchestration

Study of instrumentation and orchestration.

Prerequisite: Music 100.

(3-0; 3-0)

<sup>\*</sup> Approved for elective credit in the Faculty of Arts and Science.

#### MUS 356. (3) Introduction to Conducting

Fundamental conducting techniques as applied to instrumental and vocal music.

Prerequisite: Permission of Instructor.

(2-1:2-1)

#### MUS 360. (3) Choral Techniques

The elements of conducting, vocal production, repertoire, analysis and rehearsal technique.

Prerequisite: Music 110.

(2-1:2-1)

(2-1; 2-1)

#### MUS 456. (3) Conducting

Prerequisite: Music 356 and the consent of the instructor.

#### APPLIED MUSIC

Instruction in voice or in an instrument will be provided by the faculty of the Department of Music or by the Victoria Conservatory of Music.

#### MUS 140. (2) Individual Tuition

Lessons in instrument or voice

Prerequisite: Evidence of marked musical ability demonstrated by audition. (0-6-1;0-6-1)

### MUS 145. (3) Seminar in Performance

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance.

Prerequisite: A.R.C.T. Diploma (Performers') or equivalent.

For Performance Majors only.

(1-12-2; 1-12-2)

#### MUS 240. (2) Individual Tuition

Lessons in instruments or voice.

Prerequisite: Music 140.

(0-6-1;0-6-1)

### MUS 245. (6) Seminar in Performance

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance.

Prerequisite: Music 145.

For Performance Majors only.

(1-12-2; 1-12-2)

### MUS 340. (2) Individual Tuition

Lessons in instruments or voice.

Prerequisite: Music 240.

(0-6-1; 0-6-1)

#### MUS 345. (6) Seminar in Performance

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance.

Prerequisite: Music 245.

For Performance Majors only.

(1-12-2; 1-12-2)

#### MUS 440. (2) Individual Tuition

Lessons in instruments or voice.

Prerequisite: Music 340.

(0-6-1; 0-6-1)

This course may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts.

### MUS 445. (6) Seminar in Performance

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance.

Prerequisite: Music 345.

For Performance Majors only.

(1-12-2:1-12-2)

### MUS 447. (3) Graduating Recital

Prerequisite: Music 345.

For Performance Majors only.

#### PERFORMANCE GROUPS

MUS	180. (1)	Ensembles	(0-4; 0-4)
MUS	181. (1)	Chamber Music	(0-3; 0-3)
MUS	280. (1)	Ensembles	(0-4; 0-4)
MUS	281. (1)	Chamber Music	(0-3; 0-3)
MUS	380. (1)	Ensembles	(0-4; 0-4)

### MUS 481. (1) Chamber Music

MUS 381. (1) Chamber Music

MUS 480. (1) Ensembles

(0-4;0-4)(0-3:0-3)

(0-3;0-3)

Music 180-480, Ensembles, include the University Orchestra, University Concert Band, University Chorus, and University Chamber Singers.

Music 181-481, Chamber Music, include the standard chamber groups as well as Collegium Musicum, New Music Ensemble (Sonic Lab), and Accompanying.

Music 480 and 481 may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts.

### **GRADUATE COURSES**

Students should consult with the Department of Music concerning the courses offered in any particular year.

Apart from the following courses, graduate students are encouraged to take an active part in the performing groups and musical life of the University.

501. (1 1/2 or 3) Seminar in Historical Musical Notations

(3-0) or (3-0; 3-0)

(3-0; 3-0)

MUS 502. (3) Musical Aesthetics and the Theory of Criticism

\*MUS 503. (1 1/2) Introduction to Graduate Study and Music Bibliography

September-December only. (3-0)

(3-0) or (3-0; 3-0) MUS 504. (11/2 or 3) Seminar in Performance Practice

505. (1 1/2 or 3) History of Musical Instruments (3-0) or (3-0; 3-0)

MUS 506. (1 1/2) Musical Acoustics

### MUS 540. (1) Individual Tuition

Lessons in instruments or voice.

Optional for graduate students in musicology and composition. (0-1; 0-1)

#### ††MUS 545. (4) Major Instrument Study

Individual tuition and master class.

For M.Mus. candidates in performance only. (2-2; 2-2)

†MUS 550. (3) Studies in Particular Era of Music History (3-0; 3-0)

†MUS 551. (1 1/2 or 3) Studies in Particular Forms or Genres in Music History (3-0) or (3-0; 3-0)

†MUS 552. (1 ½ or 3) Studies in the Music, Life and Times of Individual (3-0) or (3-0; 3-0) Composers

\*\*MUS 560. (11/2 or 3) Seminar in Musicology (3-0) or (3-0; 3-0)

- \* All students in Musicology must register for this in their first term of graduate study.
- \*\* All students in Musicology must register for this each year they are in attendance.
- † May be taken more than once, in different fields, at the discretion of the Department.
- †† Performance majors must register for this in each year of study.

MUS 561. (3) Seminar in Composition

†MUS 580. (1 1/2 or 3) Directed Studies

††MUS 581. (2) Ensemble Coaching and Playing

(0-4;0-4)

§MUS 597. M.Mus. Graduating Composition(s)

MUS 598. (0) M.Mus. Practicum

Degree recital required for performance majors in final years.

§MUS 599. M.A. Thesis

§MUS 699, Ph.D. Dissertation

- †May be taken more than once, in different fields, at the discretion of the Department.
- ††Performance majors must register for this in each year of study.
- § Credit to be determined.

### DEPARTMENT OF THEATRE

- Barbara McIntyre, B.A., M.A. (Minnesota), Ph.D. (Pittsburgh), Professor and Chairman of the Department.
- Carl R. D. Hare, M.A. (Alta.), Dip. R.A.D.A., Professor. (On leave of absence 1976-77.)
- Alan Hughes, B.A., M.A. (Tor.), Ph.D. (Birmingham), Associate Professor.
  John F. Krich, A.B. (Baldwin-Wallace), M.F.A. (Yale), Associate Professor.
- Linda Hardy, B.A. (Brock), M.A. (Tor.), Assistant Professor.
- Giles W. Hogya, B.A. (Miami), M.A., Ph.D. (Northwestern), Assistant Professor.
- Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (Pittsburgh), Assistant Professor. (On study leave 1976-77.)
- Irene M. Pieper, B.A. (Calif.), M.A. (San Fran. St.), Assistant Professor. William D. West, Assistant Professor.
- Kazimierz Piesowocki, Senior Academic Assistant.
- N. Bindon Kinghorn, Senior Academic Assistant.

#### **GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and M.F.A. degrees, see page 153; for graduate courses, see page 141.

#### UNDERGRADUATE PROGRAMMES

The Bachelor of Fine Arts in Theatre is an extensive programme intended for students who wish to continue their studies in graduate or professional schools or who wish to prepare for a career in community, educational or professional theatre. The philosophy of the Theatre Department is based on the concept that the complex art of the theatre should be studied in all aspects and that by its nature it must be studied in performance. Through its courses and productions the students learn the fundamental performing and technical skills as they study the historical, contemporary and education practice of the theatre arts.

The Department offers several options to the undergraduate student—the general programme, the special programme, and an honours programme in Theatre History. Students who wish to register in the Department of Theatre as theatre majors should seek an interview with the Chairman of the Department before August 15 or during registration week. Students from two year colleges who anticipate transferring to the University of Victoria with the intention of majoring in theatre should consult the Department of Theatre before registering in any theatre courses. Such students should be aware of the special degree requirements in this area and should not normally expect to fulfill those requirements in two years.

Students will be required to take part in rehearsals and performances associated with departmental projects. They must consult the Department before accepting major commitments not related directly to their course of study.

Each season, the Theatre Department presents major productions in the Phoenix Theatre as well as various experimental performances in other locations.

#### PROGRAMME OF COURSES

#### **General Programme**

In the general programme B.F.A. students must complete sixty units of course work of which thirty normally will be in theatre and twenty-four outside the Department. Each student is required to take English 111/115 or 121/122, Theatre 100, Theatre 105, and either Theatre 120 or 181 in his first year. In his second year each student will be assigned an advisor who will develop a programme of studies related to his needs and abilities. During his final three years a student normally will be required to take Theatre 310, 311 and 312.

### Special Programme

A student showing special talent in theatre history, acting, designing, directing or theatre in education may be permitted to specialize in one of these areas. Typical outlines in these areas follow. (Normally electives will be chosen from courses outside the Department.)

#### **ACTING**

First Year		Second Y	ear	Third Ye	ear	Fourth Y	ear
Theatre 100	(3)	Theatre 310	(3)	Theatre 311	(3)	Theatre 312	(3)
Theatre 105	(3)	Theatre 205	(3)	Theatre 320	(3)	Theatre 420	(3)
Theatre 120	(3)	Theatre 220	(3)	Theatre 350	$(1\frac{1}{2})$	Elective	(3)
English 111/115		Theatre 250	$(1\frac{1}{2})$	Theatre 360	$(1\frac{1}{2})$	Elective	(3)
or 121/122	(3)	Theatre 260	$(1\frac{1}{2})$	Elective	(3)	Elective	(3)
Elective	(3)	Elective	(3)	Elective	(3)		
	15		15		15		15

### DIRECTING

First Year		Second Y	ear	Third Ye	ear	Fourth Y	ear
Theatre 100	(3)	Theatre 310	(3)	Theatre 311	(3)	Theatre 312	(3)
Theatre 105	(3)	Theatre 205	(3)	Theatre 330	(3)	Theatre 430	(3)
Theatre 120	(3)	Theatre 220	(3)	Theatre 340	(3)	Theatre 342	(3)
English 111/115		Theatre 240	(3)	Theatre 341	(3)	Elective	(3)
or 121/122	(3)	Elective	(3)	Elective	(3)	Elective	(3)
Elective	(3)						
	15		15		15		15

#### DESIGN

First Year		Second Y	ear	Third Yea	ır		I I	ourth Yea	r
Theatre 100	(3)	Theatre 310	(3)	Theatre 311	(3)		Theatre 3	312	(3)
Theatre 105	(3)	Theatre 205	(3)	Two of:	(6)		One of:		(3)
Theatre 120	(3)	Theatre 240	(3)	Theatre 340			Theatr	e 340	
English 111/115		Elective	(3)	Theatre 341 Theatre 341			e 341		
or 121/122	(3)	Elective	(3)	Theatre 342 Theatre 342			e 342		
Elective	(3)			Theatre 330	(3)		Elective		(3)
				Elective	(3)		Elective		(3)
							Elective		(3)
	15		15		15				15
THEATRE IN EDUCATIO	N								

First Year		Second Year	Second Year		Third Year		Fourth Year	
Theatre 100	(3)	Theatre 310	(3)	Theatre 311	(3)	Theatre 312	(3)	
Theatre 105	(3)	Theatre 313	$(1\frac{1}{2})$	Theatre 314	$(1\frac{1}{2})$	Theatre 315	$(1\frac{1}{2})$	
Theatre 181	(3)	Theatre 205	(3)	Theatre 330	(3)	Theatre 383	(3)	
Theatre 120	(3)	Theatre 299	(3)	Theatre 382	(3)	Theatre 490	(3)	
English 111/115		Elective	(3)	Theatre 399	(3)	Education 344*	(3)	
or 121/122	(3)	Education 341*	(3)	Elective	(3)	Theatre 414	(3)	
Elective (3)		*or approved electi	ve			*or approved elective	ve	
	18		161/2		161/2		161/2	

#### THEATRE HISTORY

First Year		Second Year		Third Year		Fourth Year	r
Theatre 100	(3)	Theatre 205	(3)	Theatre 312	(3)	Theatre 410/411	(3)
Theatre 105	(3)	Theatre 310	(3)	Theatre 315	$(1\frac{1}{2})$	Theatre 412/413	(3)
Theatre 120	(3)	Theatre 311	(3)	Theatre 371	(3)	Theatre 414	(3)
English 111/115		Theatre 313	$(1\frac{1}{2})$	Elective	(3)	Elective	(3)
or 121/122	(3)	Theatre 314	$(1\frac{1}{2})$	Elective	(3)	Elective	(3)
Elective	(3)	Elective	(3)	Elective	$(1\frac{1}{2})$		
	15		15		15		15

#### HONOURS PROGRAMME IN THEATRE HISTORY

- a) Students who are interested in an Honours Programme in Theatre History are advised to take Theatre 310 and Theatre 311 in their second year. Their progress in these courses will be carefully watched.
- b) Students must apply at the end of their second year to enter into the Honours Programme, which officially begins in their third year.
- c) The successful third-year candidate will be permitted to enter into the fourth-year programme.
- d) No candidate for Honours can progress further in the programme with less than a B+ average in his Theatre History courses. The overall academic performance for such a student must be deemed satisfactory to the chairman and faculty.
- e) All students wishing to honour in Theatre History must demonstrate an adequate reading knowledge of a language other than English, acceptable to the Department. This requirement may normally be satisfied either by courses at the Second Year level, or by authorized translation tests.
- Each Honours student will be assigned an advisor at the beginning of his third year who will help him determine his specific area of interest; the

- student will be expected, under the guidance of his advisor, to present papers to a colloquium of Theatre History faculty and other interested faculty and students.
- In his fourth year each Honours student will continue contributing papers to the colloquium and present a final graduating paper, upon which he will be examined orally by the faculty, who may expand the discussion to include other aspects of theatre history or criticism if deemed relevant.
- Honours students will be expected to participate in the productions of the Department.

To receive a first class honours degree a student must obtain a grade of at least A— in theatre history courses and have a minimum graduating average of 6.50.

To receive a second class honours degree a student must obtain a minimum graduating average of 4.00 and must obtain a grade of B+ in theatre history courses and a minimum grade point average of 5.00 in all 300 and 400 level theatre courses.

Honours students who do not meet these requirements but complete those for a major in theatre, may receive a major degree in the special (Theatre History) programme.

#### Typical Programme:

First Year		Second Year		Third Year		Fourth Year	
Theatre 100	(3)	Theatre 205	(3)	Theatre 312	(3)	Theatre 410/411	(3)
Theatre 105	(3)	Theatre 310	(3)	Theatre 315	$(1\frac{1}{2})$	Theatre 412/413	(3)
Theatre 120	(3)	Theatre 311	(3)	Theatre 371	(3)	Theatre 490	(3)
English 111/115		Theatre 313	$(1\frac{1}{2})$	Theatre 414	(3)	Elective	(3)
or 121/122	(3)	Theatre 314	$(1\frac{1}{2})$	Elective	(3)	Elective	(3)
Elective	(3)	Elective	(3)	Elective	$(1\frac{1}{2})$		
	15		15		15		15

#### COURSES

#### INTRODUCTORY COURSES

#### \*THEA 100. (3) The Language of the Theatre

A practical and theoretical introduction to play analysis, to dramatic criticism, to theatrical form, and to the principles of stage production. Attendance at live performances is required.

G. W. Hogya.

(3-0; 3-0)

#### THEA 105. (3) An introduction to Stagecraft and Technical Practice

Elementary principles of design and stage management; the techniques of scenery and costume construction.

I. M. Pieper.

(1-4;1-4)

#### THEA 205. (3) An Introduction to Design and the Support Areas of the Theatre

Elementary principles of sound, front-of-house management, and public relations; basic elements of design in relation to other disciplines of the

Prerequisite: Theatre 105.

I. M. Pieper.

(1-4; 1-4)

#### HISTORY OF THEATRE

#### \*THEA 310. (3) The History of the Theatre to 1642

An examination of the western theatre in relation to society from its beginnings in primitive ritual to the close of the English playhouses in 1642.

A. Hughes.

### \*THEA 311. (3) The History of the Theatre from 1642 to the Rise of Naturalism

An examination of the late seventeenth-, eighteenth-, and nineteenth-century theatre with particular emphasis on England, France, Italy and Germany. (3-0; 3-0)

# \*THEA 312. (3) Modern World Theatre (formerly Studies in Contemporary

An examination of the theatre from Ibsen to the present.

A. Hughes.

(3-0; 3-0)

#### THEA 313. (11/2) Period Laboratory for Theatre 310.

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 310.

Prerequisite: Permission of the instructor.

Corequisite: Theatre 310.

A. Hughes.

(0-2;0-2)

#### THEA 314. (11/2) Period Laboratory for Theatre 311

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 311.

Prerequisite: Permission of the instructor.

Corequisite: Theatre 311.

(0-2; 0-2)

#### THEA 315. (11/2) Period Laboratory for Theatre 312

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 312.

Prerequisite: Permission of the instructor.

Corequisite: Theatre 312.

A. Hughes.

(0-2;0-2)

### THEA 371. (3) A History of Dramatic and Theatrical Criticism

A detailed examination of major dramatic theories and theatrical criticism from Plato to the present day.

Not open to students with credit in Theatre 270.

Prerequisite: Permission of the instructor.

(3-0; 3-0)

### \*THEA 410. (11/2) Seminar in Theatre History: I

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)

Prerequisite: Permission of the instructor.

(Not offered 1976-77; intend to offer 1977-78.)

September-December only. (3-0)

#### \*THEA 411. (11/2) Seminar in Theatre History: II

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)

Prerequisite: Permission of the instructor.

(Not offered 1976-77; intend to offer 1977-78.)

January-April only. (3-0)

#### THEA 412. (11/2) Seminar in Theatre History: III

Intensive study of a specified period or genre. The topics for consideration will change in each term. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)

Prerequisite: Permission of the instructor.

September-December only. (3-0)

#### THEA 413. (11/2) Seminar in Theatre History: IV

Intensive study of a specific period or genre. The topics for consideration will change in each term. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)

Prerequisite: Permission of the instructor.

January-April only. (3-0)

#### THEA 414. (3) A History of Canadian Theatre

An examination of the Canadian theatre in relation to its society from its native beginnings through to the present day. The French aspects of the course will be studied in translation.

Prerequisite: Permission of the instructor.

(3-0:3-0)

#### ACTING

#### THEA 120. (3) Acting: I

First steps in movement, voice, improvisation and scene study. Elementary phonetics.

J. F. Krich.

(0-6; 0-6)

#### THEA 220. (3) Acting: II

Advanced work in acting.

Prerequisite: Theatre 120 and permission of the instructor.

Corequisite: Theatre 250 and 260.

J. F. Krich.

(0-6;0-6)

#### THEA 250. (11/2) Beginning Speech

Intensive training of the human voice with emphasis on speech for the stage.

Prerequisite: Theatre 120 and permission of the instructor.

# THEA 260. (11/2) Introduction to Stage Movement (formerly Introduction to

An introduction to the principles regulating the relationship between the use of the body and acting.

Prerequisite: Theatre 120 or permission of the instructor.

K. Piesowocki.

(0-3;0-3)

#### THEA 320. (3) Acting: III

Intensive study in characterization.

Prerequisite: Theatre 220, 250, 260 or permission of the instructor.

Corequisite: Theatre 350 and 360.

(0-6; 0-6)

#### THEA 350. (1½) Advanced Speech

Advanced training in interpretation, vocal character studies, dialects, microphone techniques.

Prerequisite: Theatre 250 and permission of the instructor.

(0-3;0-3)

#### THEA 360. (11/2) Advanced Problems in Stage Movement (formerly Special Projects in Dance)

Exploration of problems of expressive movement on the stage.

\*Approved for elective credit in the Faculty of Arts and Science.

Prerequisite: Theatre 260 and permission of the instructor.

(0-3;0-3)

#### THEA 420. (3) Special Problems in Acting

Advanced work under performance conditions.

Prerequisite or corequisite: Theatre 350, 360 and permission of the instructor. (0-6; 0-6)

#### DIRECTING

#### THEA 330. (3) Directing: I

Fundamental textual analysis; stage composition, movement and rhythm; methods of rehearsal procedure and basic techniques of working with the actor.

Prerequisite: Theatre 120 or 181 and permission of the instructor.

G. W. Hogya.

(1-4;1-4)

### THEA 430. (3) Directing: II

Advanced work in stage direction with particular emphasis on special problems of style.

Prerequisite: 330 or permission of the instructor.

J. F. Krich.

(1-4; 1-4)

# DESIGN AND TECHNICAL PRACTICE

#### THEA 240. (3) Graphic Techniques for Theatre Designers

A course designed to develop rendering and delineation skills in both freehand and mechanical idioms useful to the designer for the communication of appropriate information in an appropriate form for design development or working drawings.

W. D. West.

(1-4; 1-4)

#### THEA 340. (3) Scenery for the Theatre

Fundamentals of three-dimensional design and spatial perception in the theatre. Graphic techniques for planning, analyzing and describing plastic space for the stage. Practical problems in the design of stage settings.

Prerequisite: Theatre 105 and 240 or permission of the instructor.

W. D. West.

(2-2; 2-2)

#### THEA 341. (3) Costume for the Theatre

Problems in costume design and construction; history of costume.

Prerequisite: Theatre 105 or permission of the instructor.

I. M. Pieper.

(2-2; 3-0)

#### THEA 342. (3) Lighting for the Theatre

Lighting design; its theory and practice.

Prerequisite: Theatre 105 or permission of the instructor.

G. W. Hogya.

(2-2; 2-2)

### THEA 441. (11/2) Costume Pattern Drafting

Practical application of various techniques for drafting costume patterns for the theatre; adaptations of historical patterns, development of variations from basic patterns, and draped costumes.

Prerequisite: Theatre 341 or permission of the instructor.

I. M. Pieper.

(2-1; 2-1)

#### CHILDREN'S DRAMA

#### THEA 181. (3) An Introduction to Theatre-in-Education

A basic theoretical introduction and practical exploration of the principles and practices of drama with and for children in education and in the community. In relation to these objectives the course will explore the nature of communication, particularly as it relates to the transformation of the life situation in an art form. Examination will be made of non-verbal communication; verbal communication, both oral and written; and dramatic communication: emphasis will be placed on such spontaneous means of communication as improvisation. Studio sessions are required, as well as attendance at lectures, discussions, plays and films.

B. M. McIntyre.

(1-4;1-4)

#### THEA 382. (3) Youth Theatre

A study of the methods and materials for creative drama, improvisation, play interpretation, and reader's theatre, for elementary and secondary school age students in educational and community settings.

B. M. McIntyre.

(2-2; 2-2)

#### THEA 383. (3) Theatre-for-Young-Audiences

A study of the problems of producing plays for and by children with practical work in a variety of forms and media. Studio work will be required.

Prerequisite: Theatre 330 and permission of the instructor.

(Not offered 1976-77; intend to offer 1977-78.)

(1-4:1-4)

#### **DIRECTED STUDIES**

### THEA 299. (3) Theatre Laboratory

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Open only to second-year students in the B.F.A. programme.

(2-2: 2-2)

\*\*THEA 390. (3) Directed Studies in Theatre History

\*\*THEA 391. (3) Directed Studies in Theatre Aesthetics

\*\*THEA 392. (3) Directed Studies in Theories of Acting

\*\*THEA 393. (3) Directed Studies in Theories of Direction

### \*\*THEA 394. (3) Directed Studies in Children's Drama

Individual, supervised research in children's drama culminating in the production of a specific project either written or practical.

THEA 395. (3) Directed Studies in Design

#### THEA 399. (3) Theatre Laboratory

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Open only to third-year students in the B.F.A. programme.

(2-2; 2-2)

### THEA 490. (3) Graduating Project

Students may take directed studies under this number for credit more than once according to their areas of interest and with the permission of the Department.

### **GRADUATE COURSES**

Prerequisite: Departmental evaluation of the student's diagnostic examination and the student's experience.

THEA 500. (3) Methods and Materials of Theatre Research

THEA 501. (3) Seminar in History and Criticism of Tragedy

THEA 502. (3) Seminar in History and Criticism of Comedy

THEA 503. (3) Seminar in European Theatre History

THEA 504. (3) Seminar in North American Theatre History

THEA 505. (3) Seminar in Contemporary Theatrical Styles

THEA 506. (3) Seminar in Children's Drama

THEA 507. (3) Seminar in Children's Theatre

THEA 508. (3) Scene Design

THEA 509. (3) Lighting Design

THEA . 510. (3) Costume Design

THEA 511. (3) Production

THEA 512. (3) Directing

THEA 513. (3) Seminar in Theatre Aesthetics

\*\*Students in Arts and Science may take for elective credit only one of the five directed studies courses.

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THEA 520 (formerly 508). (3) Advanced Problems in Scene Design

THEA 521 (formerly 509). (3) Advanced Problems in Lighting Design

THEA 522 (formerly 510). (3) Advanced Problems in Costume Design

THEA 523 (formerly 512). (3) Advanced Problems in Directing

THEA 590. (3) Directed Studies

Students may take directed studies under this number for credit more than once according to their areas of interest and with the permission of the Department: 590A, Theatre History; 590B, Children's Theatre; 590C, Design; 590D, Production.

THEA 598. (Credit to be determined) M.F.A. Practicum

THEA 599. (Credit to be determined) M.A. Thesis

## DEPARTMENT OF VISUAL ARTS

Donald Harvey, A.T.D. (*Brighton*), R.C.A., Professor (Drawing and Painting) and Chairman of the Department.

John P. Dobereiner, Dip. (V.S.A.), B.Ed. (Brit. Col.), M.F.A. (Wash.), Associate Professor (Drawing and Painting) and Chairman of the Department to June 30, 1976. (On study leave 1976-77.)

Mowry Baden, B.A. (Pomona Coll.), B.A. (Stanford), Visiting Associate Professor (1975-76).

Pat Martin Bates, Dip. (Académie Royale des Beaux Arts, Antwerp), R.C.A., Associate Professor (Printmaking).

Roland Brener, Post Dip. A.D. (St. Martin's School of Art, London), Associate Professor (Sculpture and Photography).

Ruth S. Beer, B.F.A. (Sir George Williams), M.V.A. (Alberta), Assistant Professor (Sculpture).

George W. Tiessen, B.F.A. (Mount Allison), M.F.A. (Cornell), Assistant Professor (Printmaking).

John B. Boyle, Visiting Lecturer (1975-76).

Steven M. Cortright, B.A., M.A. (Stanford), Visiting Lecturer (1975-76).

J. Carl Heywood, Visiting Lecturer (1975-76).

Roelof Louw, Visiting Lecturer (1975-76).

Hap Tivey, Sessional Lecturer (1975-76).

Guy Williams, Visiting Lecturer (1975-76).

David G. Snider, B.S., M.F.A. (Wisconsin), Part-time Sessional Lecturer (1975-76).

#### **GENERAL INFORMATION**

The Department offers two undergraduate programmes leading to the degree of B.F.A. In addition, it makes every effort to serve the needs of students from other departments and other faculties, within the limits of available resources. There are no graduate offerings at the present time. The academic emphasis of the Department is on a fine art curriculum,

The academic emphasis of the Department is on a fine art curriculum, rather than on applied or craft training. The development of visual awareness and the growth of creative skills are seen as the primary goals of the programme. All courses will stress the need for individual initiative and self-discipline.

It is felt that a serious liberal education in the visual arts is an excellent foundation for many careers in art; and the Department will help and ad-

vise those students who plan later to enter professional fields.

# ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

#### 1. From secondary school

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. Applicants admissible to the University, will be admissible to the basic first-year course, Art 100 (The Principles of Design), which requires no previous experience in art.

Students intending to pursue a degree programme in Visual Arts should declare that intention by registering in the Faculty of Fine Arts. Achievement in Art 100 will determine eligibility to continue as a B.F.A. candidate.

Students who have already had considerable experience in art are invited to write to the Department Chairman or request a personal interview in order to seek academic advice. In special cases permission may be granted to include an additional Art course in the first-year programme.

Information about departmental offerings and facilities will always be available to anyone interested.

### 2. Transfer from other universities, colleges, and art schools

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. The Director of Admission Services will consult the Department for advice on transfer credit for studio courses completed elsewhere. As early as possible (normally by June 30) applicants should submit a folio of recent work to be evaluated by a committee of the Department. Folios may contain drawings, prints, paintings, or any flat material. Applicants whose specialty is in a three-dimensional area should submit photographs or slides. Letters of recommendation, evidence of prizes or awards, or other written material should be sent separately by regular mail. Folios should be sent or delivered to:

Department of Visual Arts, Room 198, MacLaurin Building, University of Victoria.

DEADLINE June 30, 1976.

If admitted to a B.F.A. programme, applicants will likely receive transfer credit for equivalent studio courses completed elsewhere.

#### 3. From other programmes at the University of Victoria

Complete the usual procedures for re-registration, as specified elsewhere in this Calendar. Applicants are urged to write to the Department Chairman or request a personal interview, if possible before June 30. Applicants wishing to submit a folio should follow the procedures listed above.

#### UNDERGRADUATE PROGRAMMES

Students who are working towards the B.F.A. degree have the choice of a major or a general programme. This permits a choice between an intensive commitment to Visual Arts (40 studio units from a degree total of 60); or a combination of Visual Arts and other university offerings (as few as 24 studio units from a degree total of 60). There are identical first-year requirements in both programmes; and the choice between major and general programmes need not be made until the beginning of second or even third year. Entry into the major programme requires the approval of the Department, and involves either the submission of a folio of recent work or a high level of achievement in Art 100. A student who chooses the general programme can, with careful planning, complete the equivalent of an academic major in another department or even in another faculty. There is no folio requirement for the general programme, though the Department reserves the right to limit admission if facilities are crowded.

Both B.F.A. programmes in Visual Arts require academic work outside the Department: students will be encouraged to exploit the full range of resources on the university campus. A liberal education in the visual arts should be a process of intellectual growth and enquiry; creative achievement in the studio, however important, cannot be the sole aim of the programme. The Department will always be pleased to offer advice about courses in other departments that may be particularly relevant to students in Visual

Arts.

#### MAJOR

Students must complete 40 units of Department offerings, including Art 100; Art 200; any three of Art 210, 220, 230, 240; 12 units to be chosen from courses at the 300 level; and Art 499 (12 units). Of the total 60 units, at least 18 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art.

### GENERAL

Students must complete 24 units of Department offerings, including Art 100; Art 200; at least one of Art 210, 220, 230, 240; and 15 units to be chosen from courses at the 300 level. At least 18 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. Of the total 60 units, at least 21 must be chosen from courses numbered 300 or above.

#### NOTES:

 Students are strongly advised to include History in Art 120 in their first-year programmes. The required 6 units of History in Art may be elected at any time during the four years.

(12)

(6)

Art or outside

electives

Outside electives

(9)

(6)

Art 499

Outside electives

- Permission of the Department may be granted, in special cases, for qualified first-year students to include in their programmes one threeunit studio course chosen from Art 210, 220, 230 or 240 to be taken in place of one elective.
- A general University of Victoria regulation requires all students either to pass the qualifying examinations in English or to complete certain English courses (see page 11).

#### **COURSES**

### First Year

### \*ART 100. (3) The Principles of Design

An introduction to visual art through an intensive exploration of its elements: line, tone, mass, colour, and texture. The emphasis will be placed upon studio experience. As far as facilities permit, the course will be open to all students in the University, regardless of background; if enrolment must be limited, priority will be given to students registered in the Faculty of Fine Arts.

(1-4; 1-4)

#### Second Year

### ART 200. (3) Drawing

This course is required of all Visual Arts students, and may be thought of as a foundation upon which all subsequent courses will be built. It is intended to increase the individual student's drawing skills and his familiarity with various drawing media.

Prerequisite: Art 100.

(0-4;0-4)

### ART 210. (3) Painting

A studio introduction to painting and related areas. This course is a prerequisite to any of Art 311, 312, or 313. (0-3; 0-3)

#### ART 220. (3) Sculpture

A general exploration of three-dimensional form and perception, with a specific emphasis on basic techniques. Attention will be given to a wide scope of sculptural media including welding, carving, casting, and plastics. This course is prerequisite to any of Art 321, 322, or 323. (0-3; 0-3)

#### ART 230. (3) Printmaking

Techniques and history of relief printing: linocut, woodcut, collograph, etc. This introductory course is recommended for students proceeding to Art 331, 332, or 333, but is not a formal prerequisite to those courses.

(0-3:0-3)

#### ART 240. (3) Photography

A basic introductory course, prerequisite to any of Art 341, 342, or 343. The art of taking, developing, and printing of photographs; darkroom techniques and practices. Enrolment will be limited by facilities available, and priority will be given to Visual Arts students. Students in this course are strongly advised to have their own cameras.

(1-2; 1-2)

### ART 280. (0) Visual Arts Seminar

A weekly group discussion of special problems in the Visual Arts. The course is an elective intended for students at the Second-Year level, but may be taken later.

Members of the Department.

(2-0; 2-0)

#### Third Year

#### ART 300. (3) Advanced Drawing

This course is intended to further increase the individual students' drawing skills. The emphasis will be on the development of a personal statement and the exploration of drawing as an art form in its own right.

Prerequisite: Art 200.

(0-4;0-4)

ART 311. (3) Painting: I

(0-3;0-3)

ART 312. (3) Painting: II

(0-3;0-3)

ART 313. (3) Painting: III

(0-3;0-3)

Advanced courses in painting (equivalent to the former Art 315 and 316). It is not necessary that these courses be taken in sequence. Concurrent registration in two or more of these courses is permitted.

Prerequisite: Art 210.

ART 321. (3) Sculpture: I

(0-3;0-3)

ART 322. (3) Sculpture: II

(0-3;0-3)

ART 323. (3) Sculpture: III

(0-3;0-3)

Advanced courses in sculpture (equivalent to the former Art 375 and 376). It is not necessary that these courses be taken in sequence. Concurrent registration in two or more of these courses is permitted.

#### ART 331. (3) Printmaking: Screen Printing

An introduction to screen printing: exploration of all stencil methods, including photo screen, with the aim of producing original prints.

(0-3;0-3)

#### ART 332. (3) Printmaking: Intaglio

Techniques and history of intaglio printing: etching, engraving, aquatint, etc. (0-3; 0-3)

#### ART 333. (3) Printmaking: Planography

Techniques and history of lithography, with an emphasis on words with images. (0-3; 0-3)

ART 341. (3) Film and Photography: I

(1-2; 1-2)

#### ART 390. (3) Directed Studies

#### Fourth Year

The following courses are for major students only; general students will complete their degree programmes from 300-level courses.

ART 490. (3) Directed Studies

ART 499. (12) Senior Project

# **FACULTY OF GRADUATE STUDIES**

The Faculty of Graduate Studies of the University of Victoria administers programmes leading to the degrees of:

Master of Arts

Master of Education

Master of Fine Arts

Master of Music

Master of Science

Doctor of Philosophy

Degrees may be taken in one Department or Faculty, or in a combination of them.

#### EXECUTIVE COMMITTEE

Members of the Executive Committee of the Faculty of Graduate Studies

Stephen A. Jennings, B.A., M.A., Ph.D., Dean of the Faculty of Graduate Studies, Chairman.

Samuel L. Macey, B.A., Ph.D., Associate Dean of the Faculty of Graduate Studies.

Representing the Humanities

Charles B. Daniels, A.B., D.Phil., Department of Philosophy.

Representing the Sciences

Alexander McAuley, B.Sc., Ph.D., Department of Chemistry.

Representing the Social Sciences

Malcolm A. Micklewright, B.A., Ph.D., Department of Geography.

Representing Education

Arthur Kratzmann, B.A., M.Ed., Ph.D., Faculty of Education.

Representing Fine Arts

Alan Hughes, B.A., M.A., Ph.D., Department of Theatre.

Secretary (ex officio)

Latif T. Ghobrial, B.A. (Monmouth Coll.), M.B.A. (Penn.), Director of Graduate Registration and Records.

### REGULATIONS

The regulations shown below have been approved by the Senate of the University of Victoria. Students registered in the Faculty of Graduate Studies are subject to such other general regulations of the University as the Senate or Board of Governors, on the recommendation of the Faculty of Graduate Studies, may wish to apply.

#### GENERAL REQUIREMENTS

The general requirements apply to all students registered in the Faculty of Graduate Studies. Special regulations are described under the headings "Special Regulations for the Master's Degree" and "Special Regulations for the Degree of Doctor of Philosophy."

### QUALIFICATIONS FOR ADMISSION

The requirements for admission to the Faculty of Graduate Studies include an academic standing acceptable to the Faculty of Graduate Studies and the department or faculty concerned; satisfactory letters of reference; the availability within the department or faculty concerned of a supervisor and of adequate space and facilities. In general, an acceptable academic standing will be a baccalaureate degree from a recognized university, or its equivalent, with at least a B (70-74%) average in the work of the last two years leading to this baccalaureate degree. Individual departments or faculties may set higher standards.

NOTE 1: Students whose native language is not English will be required to provide evidence that their knowledge of English is sufficient to allow them to proceed with their studies. (See page 11, paragraph 1 under Applicants Whose First Language Is Not English.)

NOTE 2: Overseas students should not make provision to travel to Canada until they have actually been admitted and have evidence of financial resources to allow them to pursue their studies here. See page 12 for medical requirement.

#### CATEGORIES OF STUDENTS

Students are admitted to the Faculty of Graduate Studies in one of the following categories:

- 1. Candidate for a Master's degree.
- 2. Provisional candidate for the degree of Doctor of Philosophy. All doctoral students are admitted as provisional candidates until they have passed their candidacy examinations, at which time they are automatically classified as candidates for the degree of Doctor of Philosophy. (See item 8 of the Special Regulations for the degree of Doctor of Philosophy.)
- 3. Special Graduate Student.

Special Graduate Students are students who are taking graduate courses but not for credit toward a degree at the University of Victoria. In general, such students will be either:

- taking courses for credit at another university (Exchange Graduate Students) or
- b. students who are desirous merely of improving their academic back-

If, later, a Special Graduate Student decides to proceed to a degree at the University of Victoria, the question of graduate credit for the courses already taken will be determined by the Dean, in consultation with the department or faculty concerned, at the appropriate time.

Special Students, as in a. above, must show that they have been admitted to the university at which they intend to apply their credit, i.e. they must provide a letter from their home university indicating which course(s) they are permitted to take for credit towards their degree. Special Students under b., above, must meet the Qualifications for Admission listed under that heading and have the special permission of the department or faculty concerned.

4. Qualifying Graduate Student.

A qualifying graduate student is one who is not yet a candidate for a Master's degree nor a provisional candidate for a doctoral degree. Such a student may be admitted to the Faculty of Graduate Studies on the recommendation of a department or faculty to a programme which will normally consist of at least nine units. At the end of that programme, the department or faculty concerned shall make a recommendation to the Faculty of Graduate Studies on the student's status. No student shall remain as a qualifying student for more than twelve months.

NOTE 1: Except as specified in items 2 and 4 above, it is the responsibility of the student's Supervisory Committee to request the Faculty of Graduate Studies to change his category.

NOTE 2: A full-time graduate student is one who devotes the greater part of his time to his studies and, thus, should not be gainfully employed for more than 300 hours, September through April. Students who are gainfully employed for a greater number of hours than this must register as parttime students; other students may elect so to register. No part-time graduate student may offer for credit more than six units of course work at the graduate level (courses numbered 500 to 699) in any one winter session; nor may he offer more than nine units of course work or thesis or both for credit in any twelve-month period.

NOTE 3: With the exception of the M.Ed. student who may take up to six units of course work in a Summer Session, no graduate student may take more than three units of course work at the graduate level in any one summer; moreover, he may not take an undergraduate level course in the same summer in which he takes a graduate course.

NOTE 4: No graduate student may offer for credit more than 18 units of work (courses, thesis or dissertation, or both) in any one twelve-month period.

NOTE 5: No graduate student may offer for credit more than six units of work at the undergraduate level in the final 15 units credited to his degree, and these courses shall not be below the 300 level. No Master of Education student may offer for credit more than nine units of work at the undergraduate level in the final 18 units credited to his degree, and these courses shall not be below the 300 level.

NOTE 6; Graduate courses are not open to non-graduate students, except that fourth- or fifth-year undergraduate students who have acieved a GPA of 6.0 or better, in their previous year's work, may be allowed to register in one graduate course on the recommendation of the department or faculty concerned, subject to the approval of the Dean of Graduate Studies.

#### APPLICATION FOR ADMISSION

Applications for admission must be submitted as early as possible on forms obtained from the Faculty of Graduate Studies. No assurance can be given that applications received after June 1 can be processed in time to permit registration in the winter session. A graduate of another university must arrange with that institution to forward two transcripts of his academic record to the Faculty of Graduate Studies at the time of application. Also, at the same time, all applicants must arrange to have two letters of recommendation sent to the Faculty of Graduate Studies on forms supplied by the Faculty. All applications must be accompanied by an application fee

Students who have been admitted to the Faculty of Graduate Studies by April 30 must confirm to the office of the Dean of Graduate Studies by May 31 that they intend to accept the offered place. If this is not done,

then the admission will be cancelled and the place reassigned.

#### REGISTRATION

All students admitted to the Faculty of Graduate Studies must normally register in person on the date specified for such registration. All students admitted to the Faculty of Graduate Studies must thereafter maintain continuous registration during the period of their programmes by registering in person or by mail once a year on the annual registration date and

paying the necessary fees. (See pages 15 and 16.)

Students registering for the first time are required to submit a medical history. The necessary form is mailed to each applicant with the Notice of Admission, and it must be completed and mailed to the University Health Service before registration can be completed. A medical examination is not compulsory except for resident students and those taking Physical Education courses. The medical examination is not provided by the University; it must be obtained at the student's own expense. The University, through the Director of the University Health Service, may require a student to take a medical examination at any time during his attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole. Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete.

#### PERMISSION TO WITHDRAW

A student who wishes to withdraw from the Faculty of Graduate Studies, either temporarily or permanently, must first request permission from his Supervisor. The student should then apply in writing to the Dean of the Faculty with a supporting memorandum from his Supervisor.

#### ACADEMIC STANDARDS

Students registered in the Faculty of Graduate Studies must maintain a cumulative average of at least "B" (5.0 GPA), computed yearly, on all graded courses taken for credit towards a graduate degree. Individual departments or faculties may set higher standards.

A student who fails to meet these standards, or whose dissertation or thesis is not progressing satisfactorily, may be required to withdraw from the Faculty of Graduate Studies with the advice and consent of the

department or faculty concerned.

Students who fail their final oral examination will not be recommended for a degree. Such students have the right to appeal to the Dean of the Faculty, in writing, giving reasons for requesting re-examination. Such an appeal must be made within three months of notification of failure.

# DISSERTATION OR THESIS

Regulations covering the format of dissertation or thesis may be obtained from the Faculty of Graduate Studies.

# SPECIAL REGULATIONS FOR THE MASTER'S DEGREE

1. Time Limit

Normally, a student proceeding toward a Master's degree will be required to complete all the requirements for the degree within five years (sixty months) from the date of his first registration in the Faculty of Graduate Studies. A degree will in no case be awarded in less than seven months from the time of that registration.

2. Residence Requirements

There are no fixed residence requirements at the University of Victoria for students proceeding to a Master's degree. However, see item 3 below.

3. Course and Programme Requirements

The minimum requirement for a Master's degree is the equivalent of one full Winter Session of study.

NOTE 1: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

NOTE 2: A maximum of 18 units of credit for courses, or thesis, or both, may be granted in any twelve-month period during which a student is registered full time at the University of Victoria. A maximum of nine units of credit for course work or thesis, or both, may be granted in any twelve-month period during which a student is not registered full time at the University of Victoria.

NOTE 3: A student with an honours baccalaureate degree may normally be able to obtain a Master's degree with one full Winter Session of study.

# 4. Research and Course Work

Considerable variation is permitted in the balance between research and course work required for the degree, though most programmes include a thesis based on research.

#### 5. Courses Taken at Other Institutions

On the recommendation of the department or faculty concerned, the Faculty of Graduate Studies may accept for credit in a graduate programme, courses taken at other institutions. However, the major portion of the work must be completed at the University of Victoria.

#### 6. Supervisory Committee

There shall be a Supervisory Committee of at least three members approved by the Faculty of Graduate Studies, one of whom shall be from outside the department or faculty. The Committee shall recommend to the Faculty of Graduate Studies a programme of studies; it shall examine the thesis if one is required; it shall conduct a final oral examination of the candidate on his thesis or discipline, or both, the oral being chaired by the Dean or his nominee; it may conduct other examinations; it shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.

A final oral examination is required of all students registering for the first time in 1969 and following years. The result of the examination will be entered on the student's Permanent Record Card as "Complete" if the candidate is successful. If the candidate is not successful, the entry will be "Incomplete," and a degree will not be awarded.

# 7. Examiner from Outside the Department or Faculty

The Faculty of Graduate Studies shall appoint an examiner from outside the department or faculty concerned, who may be the outside member of the Supervisory Committee (see item 6 above). Oral examinations for the Master's degree are open to interested members of faculty.

### 8. Date of Submission of Thesis

A thesis, where one is required, must be submitted to the department or faculty concerned no later than April 2 for graduation at Convocation in the Spring.

# SPECIAL REGULATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

The doctoral programme requires the planning and completion of independent and original work leading to an advance in knowledge in the student's chosen field or fields of study. In addition, a broad knowledge of the field or fields of study must be demonstrated.

# 1. Time Limit

Normally, a student proceeding to the degree of Doctor of Philosophy will be required to complete all the requirements within seven years (eighty-four months) from the date of his first registration in the doctoral programme. A degree will not be awarded in less than two years (twenty-four months) from the time of that registration.

### 2. Residence Requirements

A student proceeding to the degree of Doctor of Philosophy must spend at least two Winter Sessions at the University of Victoria, except that a student entering the doctoral programme with a Master's degree may have this residence requirement reduced to one Winter Session.

# 3. Course and Programme Requirements

The minimum requirement for the degree of Doctor of Philosophy is the equivalent of two full Winter Sessions of work beyond the Master's level or three full Winter Sessions of study beyond the Bachelor's level, and satisfactory completion of the prescribed programme.

### 4. Research and Course Work

Considerable variation is permitted in the balance between research and course work required for the degree.

NOTE 1: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

NOTE 2: A maximum of 18 units of credit for course work or dissertation, or both, may be granted in any twelve-month period during which a student is registered full time at the University of Victoria. A maximum of nine units of credit for course work or dissertation or both, may be granted in any twelve-month period during which a student is not registered full time at the University of Victoria.

#### 5. Courses Taken at Other Institutions

On the recommendation of the department or faculty concerned, the Faculty of Graduate Studies may accept for credit in a graduate programme, courses taken at other institutions. However, the major portion of the work must be completed at the University of Victoria.

6. Supervisory Committee

A student's programme shall be under the direction of a Supervisory Committee of at least five members, approved by the Faculty of Graduate Studies. The Chairman of the Committee shall be a faculty member under whose supervision the student is carrying out his major research. Two members of the Committee shall be chosen by the Faculty of Graduate Studies from outside the department or faculty in which the major research is being carried out. The Committee shall recommend the programme to the Faculty of Graduate Studies.

7. Language Other Than English

Ph.D. programmes may require a reading knowledge of one or more languages other than English. Language requirements will be prescribed for individual students by the Supervisory Committees according to departmental (or Faculty of Education) regulations.

8. Candidacy Examinations

Within two years of registration as a provisional doctoral student and at least six months before the final examination, a student must pass a candidacy examination in subjects relevant to the general field of his research and such other examinations, written or oral, or both, as may be required by the Supervisory Committee.

The results of the candidate's research must be presented in a dissertation satisfying the general requirements of the Faculty of Graduate Studies. The material must be of sufficient merit to meet the standards of scholarly publications. Where the research justifies it, the degree of Doctor of Philosophy may be awarded for the dissertation alone.

10. Examining Committee

The dissertation shall be assessed by an Examining Committee which will consist of the Supervisory Committee and at least two other examiners, one of whom shall be an external examiner selected by the Faculty of Graduate Studies in consultation with the department or faculty primarily concerned and who is an authority in the special field of research.

The final oral examination, based largely on the dissertation, shall be conducted by the Examining Committee, which will recommend a successful candidate for the degree of Doctor of Philosophy to the Faculty of Graduate Studies. The Dean of the Faculty of Graduate Studies or his nominee will act as Chairman at the final oral examination. Oral examinations for the degree of Doctor of Philosophy are open to members of faculty.

Notice of examinations shall be communicated to all members of faculty at least fourteen days prior to the date of the examinations.

11. Date of Submission of Dissertation

A dissertation must be submitted to the department or faculty concerned no later than March 26 for graduation at Convocation in the Spring.

# ANTHROPOLOGY

The Department of Anthropology offers a course of study leading to the degree of Master of Arts. This programme usually requires two years to complete, but in exceptional cases, the required time may be shorter.

Admission - In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the department requires applicants to submit a recent sample of their work (term paper or Honours thesis). Ordinarily a B+ average for the last two years of University work is a minimum requirement for admission to the programme.

The Master of Arts degree in anthropology is a general degree requiring a candidate to have a broad knowledge of the subfields of the discipline. In addition to requirements and procedures specified by the Faculty of

Graduate Studies, the following general comments apply.

#### 1. Programme of Studies

CORE COURSES: Normally in the first year of graduate studies a student's programme will include the following core courses:

ANTHROPOLOGY 500, Seminar in Anthropological Theory, 3 units.

ANTHROPOLOGY 501, Seminar in Social and Cultural Theory, 11/2

ANTHROPOLOGY 540, Seminar in Archaeology and Culture History, 11/2 units.

ANTHROPOLOGY 550, Seminar in Physical Anthropology, 11/2 units. Core courses contribute 71/2 units toward the 15-unit minimum requirement for the Master of Arts degree.

THESIS: All graduate students are required to submit a master's thesis. The thesis, carrying 3 units of credit, must meet the stylistic requirements of the department and must be submitted according to a time schedule set by the department. Normally a thesis will entail specialized research in a topical area chosen in consultation with the student's supervisory committee.

OPTIONAL COURSES: Students may choose the remainder of their programmes from the departmental listings of graduate courses, and may take a maximum of 6 units of upper level undergraduate courses.

2. Length of Programme

Though most students require two years to complete a master's degree, it is possible for a student with satisfactory background (i.e. the equivalent of a University of Victoria Honours degree in anthropology) to complete the degree in one year. The programme outlined above indicates the minimal requirements for graduate students; however, it is the responsibility of the student's supervisory committee to tailor the programme to individual

For example, students who intend to enter the programme without an undergraduate major would be advised to spend a first year in upper level undergraduate courses before entering the core programme. Similarly, students who have not had courses in quantitative methods and in anthropological linguistics will be advised to elect Anthropology 416 and 417 and Linguistics 361 respectively, to correct these deficiencies.

Prospective students are urged to consult the department for guidance

in planning a programme of study and for more specific information about

course offerings.

#### Faculty and Current Areas of Interest

William H. Alkire, Ph.D. (Illinois)

N. Ross Crumrine, Ph.D. (Arizona)

Leland H. Donald, Ph.D. (Oregon)

Orville S. Elliot, Ph.D. (Harvard)

Robert F. Gray, Ph.D. (Chicago)

Robert B. Lane, Ph.D. (Wash.)

Donald H. Mitchell, Ph.D. (Oregon)

Kathleen A. Mooney, Ph.D. (Michigan)

Ethnology, cultural ecology, Micronesia and Southeast Asia

Structural and symbolic anthropology, mythology and religion, Latin America, Southwestern North America

Social organization, cultural ecology, statistical methods, sub-Saharan Africa

Physical anthropology, primatology, osteology, human genetics; Southeast Asia.

Social anthropology, ethnology medical anthropology; East Africa

Social anthropology, ethnology, social structure, Melanesia and the Pacific, Northwestern North America

Archaeology, cultural ecology, North-west Coast, North American Indian

Urban and reserve Indians, linguistics, Northwest Coast, North American

# BACTERIOLOGY AND BIOCHEMISTRY

The Department of Bacteriology and Biochemistry offers courses of studies leading towards the degree of Master of Science and Doctor of Philosophy in the general area of Nutritional Biochemistry and to the Master's level in certain aspects of Bacteriology.

The general regulations governing the granting of advanced degrees as stated in Calendar pages 142-144 are applicable.

- 1. Examinations, oral or written, are mandatory for candidates entering the graduate programme in Biochemistry or Bacteriology. These examinations are essential as an aid in the planning of the candidate's subsequent academic programme.
- 2. All graduate students are required to participate in Biochemistry 580 (Seminar) or Bacteriology 580 (Seminar) throughout the period of registration.
- 3. Candidates for the M.Sc. will be required to demonstrate to the Department their capabilities in a language other than their own. Ph.D. candidates must demonstrate this capability in two languages other than their
- Thesis: The thesis topic is to be selected in consultation with the Department. The outcome of the thesis project will be deemed adequate if (1) it can be shown to be a new contribution to knowledge and (2) if it is acceptable for publication in a refereed Scientific Journal.

#### Faculty members are:

James T. Buckley, Ph.D. (McGill) Trevor J. Trust, Ph.D. (Melbourne) Alex J. Wood, Ph.D. (Cornell)

# BIOLOGY

The Department of Biology offers programmes leading to the degrees of Master of Science and Doctor of Philosophy in the following general areas: Marine Biology

Terrestrial and Freshwater Ecology Plant and Animal Physiology Plant and Animal Morphology Cellular and Developmental Biology Systematic Biology

# Faculty

Michael J. Ashwood-Smith, Ph.D. (London)

F. Thomas Algard, Ph.D. (Stanford)

W. Gordon Fields, Ph.D. (Stanford)

Arthur R. Fontaine, D.Phil. (Oxon.)

George O. Mackie, D.Phil. (Oxon.)

John N. Owens, Ph.D. (Brit. Col.)

Alan P. Austin, Ph.D. (Wales)

David J. Ballantyne, Ph.D. (Maryland)

Marcus A. M. Bell, Ph.D. (Brit. Col.)

Derek V. Ellis, Ph.D. (McGill)

Edwin M. Hagmeier, Ph.D. (Brit. Col.)

John S. Hayward, Ph.D. (Brit. Col.)

Louis A. Hobson, Ph.D. (Wash.)

Jack L. Littlepage, Ph.D. (Stanford)

John E. McInerney, Ph.D. (Brit. Col.)

Robert G. B. Reid, Ph.D. (Glasgow)

Richard A. Ring, Ph.D. (Glasgow)

E. Derek Styles, Ph.D. (Wis.)

Patrick T. Gregory, Ph.D. (Man.)

John W. Paden, Ph.D. (Idaho)

Miles Paul, Ph.D. (Stanford)

# Areas of Research

Ultra-Violet Photobiology and Mechanisms of Mutation Induction; Low Temperature Biology

Developmental Biology; Growth & Differentiation in vitro, Sex Steroid Effects, in vitro.

Embryology and Natural History of Marine Invertebrates; Cephalopods.

Functional Morphology of Marine Invertebrates: Echinoderms.

Behavioural Physiology and Ultrastructure of Marine Invertebrates: Coelenterates.

Plant Anatomy; Morphogenesis and Reproduction of Conifers.

Marine and Freshwater Phycology.

Plant Physiology: Mode of Action of Air Pollutants; Aging of Conifer

Ecology: B.C. Vegetation; Urban and Regional Landscape; Pollution.

Marine Ecology: Sediment Benthos.

Terrestrial and Freshwater Ecology.

Environmental Physiology: Temperature Adaptation in Homeotherms; Hyperbaric oxygenation.

Biology Oceanography: Phytoplankton Ecology and Physiology.

Biological Oceanography: Zooplankton Physiology and Ecology.

Behaviour and Physiology of Fishes.

Physiology of Marine Invertebrates.

Physiology and Ecology of Insects.

Plant Genetics: Flavonoid biosynthesis: Paramutation.

Population Ecology of Reptiles and Amphibians.

Mycology: Ascomycete Morphology and Systematics; Soil Microbiology.

Developmental Biology; Marine Invertebrate Embryology.

# **Facilities**

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory and a closed-circulation seawater system. Ships are available for oceanographic work. The campus computing centre has an IBM 370 Model 145, with 512 K storage and standard ancillary equipment. Marine, terrestrial and limnological environments permit field work throughout the year.

# **Applications**

Initial enquiries regarding graduate studies in Biology should be addressed to the Chairman, Graduate Studies Committee, Department of Biology. Application forms may be obtained from the Secretary of the Faculty of Graduate Studies.

Consideration of an applicant is dependent on a departmental faculty member first agreeing to become his Supervisor. If the applicant is admitted, the Supervisor will recommend a list of individuals to act as a Supervisory Committee under his Chairmanship.

Applicants to the Department of Biology should arrange to take the GRE (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies together with their application forms. Applicants whose native language is not English should, in addition to the GRE, write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies together with their application forms and GRE results.

All M.Sc. and Ph.D. candidates admitted to the Department of Biology are expected to have or to make up a background knowledge of basic biology at least equivalent to that of a B.Sc. student graduating from this department.

Applications from students with a first class academic record will be considered for recommendation at any time. Applications from students who have less than a first class average will not normally be considered until the end of February, when all such applications will be considered and evaluated together. Applicants with less than a B+ average or its equivalent in their last two years of work will not normally be recommended for admission by the Department of Biology.

# CHEMISTRY

The Department offers programmes of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organo-metallic chemistry; fluorine chemistry; transition metal chemistry; inorganic photochemistry; hydrides of silicon, boron, and transition metals; multinuclear NMR studies; synthetic organic chemistry; natural products; biogenesis; physical organic chemistry; photochemistry; kinetics and mechanisms; free radical chemistry; carbohydrate chemistry; structural studies; x-ray crystallography; molecular spectroscopy; electrode kinetics; surface phenomena; solid state luminescence; electron impact phenomena; molecular orbital calculations.

Amongst the many modern research instruments available are: high resolution mass spectrometer, x-ray diffractometer, Mössbauer spectrometer, gas chromatographs, ESR and multinuclear Fourier transform NMR facilities, infrared and ultraviolet spectrometers, gas chromatographs, G.C./M.S., laser interferometers, signal averager, PDP11 and IBM 370/145-512K

Because of the varied backgrounds of students entering graduate school, the Department requires all entering graduate students to take a set of orientation examinations soon after their arrival. Students showing deficiencies in their knowledge of fundamental chemistry will be required to make good the deficit by approved reading or by taking and passing the appropriate undergraduate courses. Normally one year will be allowed for the removal of such deficiencies. Failure to achieve a minimum of B in an undergraduate chemistry course will normally result in the student being asked to withdraw.

Candidates for graduate degrees are required to complete Chemistry 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). They are also required to take Chemistry 509 (Seminar) throughout their period of registration. In addition, candidates for the M.Sc. degree are required to complete at least 9 units of graduate courses in Chemistry. For the Ph.D. degree 15 units of graduate courses in Chemistry are normally required. In both cases substitution of appropriate courses from other departments may be made with the permission of the candidate's supervisory committee.

#### Faculty and Major Fields of Research

Walter J. Balfour, Ph.D. (McMaster)

Graham R. Branton, Ph.D. (Southampton)

Gordon W. Bushnell, Ph.D. (West Indies)

Thomas W. Dingle, Ph.D. (Alta.)

Electronic spectroscopy.

Photoelectron spectroscopy and electron impact phenomena.

Crystallography.

Theoretical chemistry.

Keith R. Dixon, Ph.D. (Strathclyde)

Alfred Fischer, Ph.D. (N.Z.)

Sidney G. Gibbins, Ph.D. (Wash.)

Martin B. Hocking, Ph.D. (Southampton)

Alexander D. Kirk, Ph.D. (Edinburgh)

Alexander McAuley, Ph.D. (Glasgow)

Reginald H. Mitchell, Ph.D. (Cantab.)

Robert N. O'Brien, Ph.D. (Manchester)

Gerald A. Poulton, Ph.D. (Sask.)

Frank P. Robinson, Ph.D. (Alta.)

Stephen R. Stobart, Ph.D. (Nottingham)

Paul R. West, Ph.D. (McMaster)

Transition metal and organometallic chemistry.

Physical organic chemistry.

Hydrides of silicon, boron and transition metals.

Synthetic and physical organic chemistry; pollution control.

Photochemistry and luminescence of coordination compounds.

Inorganic kinetics and mechanisms—solvolysis and redox reactions.

Synthesis of novel aromatic hydrocarbons.

Electro and surface chemistry.

Natural products.

Organic synthesis; Physical organic chemistry.

Main groups organometallic chemistry — metal hydrides.

Electron spin resonance; Organic free radical reaction mechanisms.

# **CLASSICS**

The Department of Classics offers a programme of studies leading to the degree of Master of Arts, in the two areas:

Greek Literature Latin Literature

Studies will concentrate variously on the playwrights, epic and lyric poets, historians, and on particular ages such as the Periclean and Augustan periods. A total of at least 15 units of work is required. Proficiency in reading either French or German or Italian must be demonstrated. For further information, please consult the Chairman of the Department and read the Department's entry in the undergraduate section of this calendar.

#### Faculty and Fields of Research

Geoffrey J. D. Archbold, M.A. (Cincinnati), Roman Imperial History.

David A. Campbell, M.A. (Oxon.), Greek and Latin Lyric and Elegiac Poetry.

John G. Fitch, Ph.D. (Cornell), Greek and Roman Tragedy, Latin Epic.

Herbert H. Huxley, M.A. (Cantab.), F.I.A.L., The Greek Anthology, Augustan and later Latin Poetry.

Samuel E. Scully, Ph.D. (Tor.), Greek Tragedy, Greek Epics, Greek Moral and Political Thought. (On study leave 1976-77.)

Gordon S. Shrimpton, Ph.D. (Stanford), Greek History, Ancient Historiography.

Peter L. Smith, Ph.D. (Yale), Roman Comedy, Augustan Latin Poetry.

# **ECONOMICS**

The Department of Economics offers courses of studies leading towards the degree of Master of Arts. The programme is designed for completion in one year. Facilities are available for programmes in International Trade and Economic Development, Regional and Urban Economics and Natural Resources Economics, Economic History, Industrial Organization and Public Policy, and others.

# Faculty and Major Areas of Research

Leonard Laudadio, Ph.D. (Wash.)

Leo I. Bakony, Ph.D. (Wash.)

Gordon W. Bertram, Ph.D. (Calif).

J. Colin H. Jones, Ph.D. (Queens)

Microeconomic theory; Environmental economics; Industrial organization.

Econometrics; Macroeconomic theory.

Economic history.

Industrial organization; Micro-economic theory.

Izzud-Din Pal, Ph.D. (McGill)

Kenneth L. Avio, Ph.D. (Purdue)

Robert V. Cherneff, Ph.D. (Wash.)

Joseph Schaafsma, Ph.D. (Tor.)

John A. Schofield, Ph.D. (S. Fraser)

William D. Walsh, Ph.D. (Yale)

Gerald R. Walter, Ph.D. (Calif.)

International trade; Economic development; Microeconomic theory.

Microeconomic theory; Human resources; Monetary theory.

Macroeconomic theory, Monetary theory, International trade.

Statistics; Public finance.

Regional economics; Benefit/cost theory.

Labour economics, Macroeconomic theory.

Urban economics, Resources, Economic doctrine.

# **EDUCATION**

#### MASTER OF ARTS

The Faculty of Education offers programmes leading to the Master of Arts degree in the following areas:

Educational Psychology (including Counselling)

Educational Administration

Curriculum and Instruction

- Language Arts
- Mathematics
- Music
- Physical Education
- Science
- Social Studies

In addition to the usual admission requirements of the Faculty of Graduate Studies, applicants should have had at least two years of successful relevant professional experience.

#### MASTER OF EDUCATION

The Faculty also offers programmes leading to the degree of Master of Education in the following areas:

Educational Administration

Language Arts

Mathematics

Music

Physical Education

School Counselling

Science

Secondary Reading

Social Studies

The general regulations for this degree are as follows:

- (i) The Master of Education degree will require at least 18 units of course work, of which no more than nine units may be at the 300 and 400 level. A comprehensive final examination, (written and/or oral) will be required. A Project in research and/or curriculum development may be required as determined by the Faculty of Education.
- (ii) The usual admission requirements of the Faculty of Graduate Studies should be met and, in addition, applicants must have had at least three years of successful relevant professional experience.

However, applicants who do not meet the normal admission requirements of the Faculty of Graduate Studies may be granted conditional admission to the M.Ed. programme, provided the applicant:

(a) holds a recognized bachelor's degree

- (b) has successful relevant professional experience for a minimum of five years as attested to by at least two supervisors of the applicant's work
- (c) is recommended for admission by the Faculty of Education and approved by the Admissions Committee of the Faculty of Graduate Studies.

Formal admission to the M.Ed. programme for conditionally-admitted students will be granted to those who achieved a B average, with no grade less than a B— on the first six units of work in the programme.

#### **DOCTOR OF PHILOSOPHY**

The Faculty also offers programmes leading to the Ph.D. degree in Educational Psychology.

The Faculty of Education will observe the following deadlines for initial applications to all programmes:

February 15:

For applicants seeking Scholarships and Fellowships. (In the event of enrolment limitations, preference will be given to applicants meeting this deadline.)

March 31:

For applicants seeking admission to the following Summer Session.

May 31:

For applicants seeking admission in September of the following Winter Session.

October 15:

For applicants seeking admission in January of the current Winter Session.

### Faculty

Robert D. Armstrong, Ed.D. (Calif.)

J. Douglas Ayers, Ph.D. (Tor.)

Alex Bavelas, Ph.D. (M.I.T.)

Robert D. Bell, Ph.D. (Ore.)

Harvey Bennett, Ph.D. (Ore.)

Alan Bowd, Ph.D. (Calgary)

Ian L. Bradley, Ed.D. (Brit. Col.)

Irvin K. Burbank, Ed.D. (Utah St.)

Gerald A. Carr, Ph.D. (Stellenbosch)

Rey A. Carr, Ph.D. (Calif.)

David J. Chabassol, Ph.D. (Alta.)

Franklin E. Churchley, Ed.D. (Columbia)

Martin L. Collis, Ph.D. (Stanford)

William K. Cross, Ed.D. (Wash. St.)

Donald R. Daugs, Ph.D. (Ore. St.)

Jerry L. Deffenbacher, Ph.D. (Ore.)

Jean D. Dey, Ed.D. (Calif.)

David Docherty, Ph.D. (Ore.)

John A. Downing, Ph.D. (London)

# Areas of Research

Language in the elementary school

Psychometrics; evaluation; cognitive processes

Communcation processes in educational administration; the development of value structures in the elementary school child; teaching as an intellectually hazardous occupation

Motor learning; instructional methodology

Geography; Geography in Education; Teaching Techniques; Geographic and Educational Field Studies; Social Studies; In-Service Education

Cognitive development; crosscultural psychology

Aural and visual discrimination in music; Canadian music

Curriculum development; methodology; mathematics education

Historical and comparative physical education

Mutual growth learning; psychobody learning; learning rhythms; counselling; school psychology; nonverbal communication

Adolescence; attitudes, opinions, and problem areas

Music curriculum development, elementary and secondary; early childhood music; piano in music education

Theory and practice of physical fitness and fitness testing; human response to hypothermia and exercise stress

Social studies methodology; teacher education

Elementary science; readability; curriculum development

Counselling theory and practice; cognitive and behavioral counselling; aspects of anxiety and anxiety management

Language arts; early childhood education

Elementary physical education; movement and games; fiitness; acquisition of motor skills

Psychology of reading; children's language and thought; crosscultural experiments/comparative education John D. Eckerson, Ph.D.

Peter O. Evanechko, Ph.D. (Alta.)

Charles G. Galloway, Ph.D. (Calif.)

Cary F. Goulson, Ed.D.

John F. Hall, Ph.D. (Ore. St.)

W. John Harker, Ed.D. (Brit. Col.)

Geoffrey S. Hodder, M.A. (U. of Vic.)

Christopher E. Hodgkinson, Ed.D. (Brit. Col.)

Edgar B. Horne, Ph.D. (Illinois)

Bruce L. Howe, Ph.D. (Ore.)

Terry D. Johnson, Ed.D. (Brit. Col.)

A. Richard King, Ph.D. (Stanford)

Donald W. Knowles, Ph.D. (Alta.)

Arthur Kratzmann, Ph.D. (Chicago)

Werner W. Liedtke, Ph.D. (Alta.)

Fred L. Martens, Ph.D. (Ore.)

Geoffrey P. Mason, Ph.D. (Wash. St.)

Norma I. Mickelson, Ph.D. (Wash.)

Richard H. J. Monk, Ph.D. (Wash.)

Margaret M. Moody, D.Ed. (Ore.)

Walter Muir, Ph.D. (Alta.)

Lloyd O. Ollila, Ph.D. (Minn.)

Edward E. Owen, Ph.D. (Edin.)

R. Vance Peavy, D.Ed. (Ore.)

K. George Pedersen, Ph.D. (Chicago)

Kerry C. Quorn, Ph.D. (Wash. St.)

Roger A. Ruth, Ph.D. (Calif., Berkeley)

Marion A. Small, M.Ed. (W. Wash.)

Hugh Taylor, Ed.D. (Wash. St.)

Exercise physiology; adapted and/or special physical education

The nature and development of language abilities; the development of word meaning and reading competence

Educational psychology; behaviour modification; individualized instruction; special classes

Secondary history methodology; history of education

History of science; ecology and outdoor education

Language education; psycholinguistics

Art curriculum; aesthetic judgmental process

Philosophy of administration; values in administrative and organizational theory; value theory; values education; general philosophy

Curriculum development and individualized instruction in secondary mathematics

Sport psychology; curriculum development; activity for retarded children

Children's literature; psycholingustic approaches to reading instruction

Socio-cultural variables in educational processes

Developmental psychology (children and adolescents); process variables in counselling; selection of counsellors.

The governance of education; early childhood education

Elementary mathemaics; early childhood education

Principles of physical education

Measurement and evaluation of student achievement, educational programmes, moral development

Reading; language

Secondary English composition

Elementary art education

Learning; measurement; computer applications

Early learning; developmental and remedial reading

Geography; social studies

Phenomenology; transpersonal psychology; counselling, therapy and the creative arts

Educational administration: economics of education; educational finance; educational planning; problem analysis and problem solving

Elementary language arts programmes; teacher effectiveness

Children's verbal associations; social class differences in learning

Art education; curriculum development; methodology

Innovations in grading, grade contract, criterion-references grades; affective measurement; personality and sports Henry G. Timko, Ed.D. (Illinois)

Beverly A. Timmons, D.Ed. (Ore.)

Ronald E. Tinney, Ph.D. (Minn.)

James H. Vance, Ph.D. (Alta.)

Margery M. Vaughan, Ed.D. (Georgia)

Larry D. Yore, Ph.D. (Minn.)

William M. Zuk, Ph.D. (Ore.)

Perceptual skills in beginning reading

Delayed auditory feedback; stuttering; analysis of speech

Learning disabilities; relationships and communication skills

Mathematics education

Musical creativity; music curriculum

Science education; teacher supervision and evaluation

Cross-cultural, early childhood and art education

# **ENGLISH**

Beginning in September, 1977, the Department of English will again be offering the M.A. degree in English, Canadian, American and Commonwealth Literature. All candidates for the degree must meet all the general requirements of the University of Victoria Faculty of Graduate Studies as well as the specific requirements of the Department of English.

Although the Department is authorized to offer the Ph.D., applicants

for this degree are not being accepted at the present time.

All applicants must have achieved at least a high second class standing (normally a B+ average) in the final two years of their undergraduate work. With a good Honours B.A., or a strong major in English, a full-time student could normally expect to finish the M.A. within one calendar year. A part-time student, or one who is required to make up course work at the undergraduate level, would normally need at least two years for completion of the degree. A total of at least 15 units of credit is required. Half year and full year seminars carry 1½ and 3 units of credit respectively. The thesis is valued at from 3 to 6 units. Students in both programmes must take (normally in December or March) a general examination based on a reading list. Proficiency in reading a language other than English must be demonstrated by means of a written test.

The Department offers two programmes, of equal status, leading to the

M.A. degree:

- 1. Course work and Thesis. This programme consists of 9-12 units of graduate course work, which must include English 500 and 501 (unless the equivalent of either has been done elsewhere), a thesis of 60-90 typescript pages, and a final oral examination.
- 2. Course work and Examination without Thesis. This programme consists of 15 units of graduate course work. A final oral examination will be based on work submitted in one or more of the seminars chosen.

The course of study for each individual M.A. candidate will be determined by the Director of English Graduate Studies in consultation with the student and his supervisory committee. Transfer is possible from one programme to the other, except in cases where a student has been asked to withdraw.

There are no teaching assistantships, but candidates who wish to gain some teaching experience at the undergraduate level will usually be given the opportunity to do so under the supervision of members of the Depart-

ment.

A departmental guide, A Handbook for Graduate Students, is available on request.

#### Faculty and Areas of Interest

Lionel Adey, Ph.D. (Leicester), 19th century British literature, and Chaucer

Michael R. Best, Ph.D. (Adelaide), Renaissance drama; Elizabethan popular culture

Thomas R. Cleary, Ph.D. (Princeton), Restoration and 18th century literature

Charles Doyle, Ph.D. (Auckland), modern American poetry

Anthony S. G. Edwards, Ph.D. (London), 15th and 16th century English literature and bibliography

Melvyn D. Faber, Ph.D. (Calif., Los Angeles), Shakespeare, literature and psychology

Bryan N. S. Gooch, Ph.D. (London), 17th and 18th century British literature: relationship between poetry and music

Patrick Grant, D.Phil. (Sussex), Renaissance literature

John G. Hayman, Ph.D. (Northwestern), 18th and 19th century British literature

David L. Jeffrey, Ph.D. (Princeton), Chaucer and mediaeval literature

Anthony W. Jenkins, Ph.D. (Calif., Berkeley), late mediaeval literature

Carol V. Johnson, Ph.D. (Bristol), modern American poetry, modern European literature, critical theory

Patricia Köster, Ph.D. (London), 18th century literature

Burton O. Kurth, Ph.D. (Calif., Berkeley), Renaissance literature and drama

Robert G. Lawrence, Ph.D. (Wis.), Elizabethan and Jacobean drama

Roy F. Leslie, Ph.D. (Manchester), Old and Middle English literature, history of the English language

Samuel L. Macey, Ph.D. (Wash.), Restoration and 18th century British literature

Frederick Mayne, Ph.D. (Witwatersrand), modern drama with comedy and satire

Victor A. Neufeldt, Ph.D. (Illinois), 19th century British literature

Colin J. Partridge, Ph.D. (Nottingham), 19th and 20th century American literature, Commonwealth literature

John D. Peter, D. Litt. (S. Africa), D. Litt. (Rhodes), Milton, Modern British fiction and poetry

Terry G. Sherwood, Ph.D. (Calif., Berkeley), Renaissance literature

Herbert F. Smith, Ph.D. (Rutgers), 19th century American literature

Nelson C. Smith, Ph.D. (Wash.), 19th century British fiction, American literature

Rosemary Sullivan, D. Phil. (Sussex), Canadian literature, modern poetry David S. Thatcher, Ph.D. (Alta.), Modern British literature

Diane Tolomeo, Ph.D. (Princeton), Renaissance literature, Anglo-Irish literature

Bruce E. Wallis, Ph.D. (Princeton), 18th and 19th century British literature

Trevor L. Williams, Ph.D. (Wales), 20th century British literature and political/historical background

# FRENCH LANGUAGE AND LITERATURE

- I. The Department of French Language and Literature will consider applications for the M.A. Programme in French Studies from the following:
  - (a) Students from Canadian and American universities with B.A. (Honours) or B.A. (Major) in French;
  - (b) Students from British universities with B.A. (Honours) in French, or, in the case of Scottish universities, M.A. (Honours) in French. In both of these cases, first-class or second-class, division I or II, standing will be required.
  - (c) Students with equivalent qualifications.
- II. In order to qualify for the M.A. programme, candidates will be expected to have completed a minimum of eight courses (twenty-four units) at third and fourth-year levels; such a programme to include French 302 and French 402 (sequential courses in stylistics), one course on the history of the French language, and four courses selected from the following areas of literary study: the Mediaeval period, the Renaissance, the seventeenth, eighteenth, nineteenth, and twentieth centuries.
- III. All candidates will have their previous academic background evaluated by the M.A. Committee. In the light of this evaluation, an appropriate programme will be drawn up for the student in consultation with the graduate advisor. The M.A. Committee of the Department will then assign a supervisory committee to each candidate according to the regulations of the Faculty of Graduate Studies.
- IV. The M.A. shall consist of fifteen units of graduate credit:
  - (a) a thesis of twenty thousand to twenty-five thousand words, worth six units of credit;
  - (b) three full courses, or two full courses plus two half-courses, for nine units of credit.
- V. The thesis topic selected by the candidate must have the approval both of the supervisory committee and the M.A. committee. This regulation also applies to any substantial change from the approved topic which the candidate may find it necessary to make in the course of his research.
- VI. Candidates will be required to possess a reading knowledge of English. In addition, candidates must satisfy the Department that they have a working knowledge of Latin or another approved language.

#### Faculty and Areas of Interest

Olivier M. Abrioux, Ph.D. (Aberdeen)

Ralph W. Baldner, Ph.D. (Calif.)

Gwladys V. Downes, D.U. (Paris)

Elaine Limbrick, D. de IIIe cycle (Poitiers):

Jennifer R. Waelti-Walters, Ph.D. (London)

XVIIth Century French Literature and History of Ideas; XXth Century French Literature to 1950

XVIIth Century French Novel; XXth Century French Novel

The Theory and Practice of Symbolist Poetry; Contemporary French-Canadian Poetry

Montaigne; XVIth Century French Literature and History of Ideas

Butor; Le Clézio; XXth Century Novel

# **GEOGRAPHY**

The Department of Geography offers courses of study and research leading to an M.A. degree. Individual programmes may be arranged in economic, urban, resources, physical and regional geography with emphasis on Canada, especially Western Canada, and the Pacific Basin.

Candidates may also be accepted for programmes of study leading to the

degree of Ph.D.

#### The Faculty and Research Interests are:

Michael C. R. Edgell, Ph.D. (Birm.)

Charles N. Forward, Ph.D. (Clark)

Harold D. Foster, Ph.D. (London)

Charles H. Howatson, M.A. (Brit. Col.)

David C.-Y. Lai, Ph.D. (London)

Malcolm A. Micklewright, Ph.D. (Wash.)

Peter E. Murphy, Ph.D. (Ohio St.)

J. Douglas Porteous, Ph.D. (Hull)

William M. Ross, Ph.D.

(Wash.) W. R. Derrick Sewell, Ph.D. (Wash.)

Stanton E. Tuller, Ph.D. (Calif., Los Angeles)

Rudolf Wikkramatileke, Ph.D. (London)

Colin J. B. Wood, Ph.D. (McMaster)

Biogeography; Resources; Australia

Urban; Ports; Canada;

Geomorphology; Hydrology

Western Canada: Geology

China; Industrial; Urban

Economic; Cartography

Urban; Behavioural; Quantitative

Urban: Social

Resources; Political; Legal

Resources; Behavioural

Climatology

Southeast Asia; Cultural

Economic; Resources; Quantitative

Admission to the departmental graduate program is normally granted only to those students having honours or majors degrees with first or second class standing in geography (at least a B average). Students from the British Isles, for example, are expected to have obtained an upper second class honours degree. A promising student lacking such qualifications may be allowed to make up this deficiency, being required to register as an unclassified student.

#### Programme of Study

Acceptance into the graduate programme normally implies both attendance at formal courses and the presentation of a thesis. Theses are generally expected to focus on one of the three departmental areas of special interest. There is some flexibility in the number of units required to successfully complete a graduate degree programme. After consultation with the student at the time of registration, the programme is determined by the three faculty members comprising the student's Supervisory Committee. Credit may, in certain cases, be transferred from other graduate institutions, although each case is assessed individually. A student normally should expect to spend two academic years in attendance to obtain a Master's degree, although an exceptionally well qualified student may complete his course of study in a single year. Doctoral candidates are required to spend two years in attendance and normally complete the programme in three years.

Enquiries concerning the graduate programme may be addressed to the Graduate Studies Advisor, Department of Geography. Application forms for admission, which include the indication of need for financial assistance, can be obtained directly from the Faculty of Graduate Studies. The attention of students is drawn to the departmental closing date for applications, March 31. Completed applications and supporting documents must be available for consideration by the Department on, or prior to, that date.

# HISTORY

The department offers two programmes leading to the M.A. degree: (1) by thesis, and (2) by course work. Admission to either programme normally requires a Bachelor's degree with a minimum overall average of B+ (75% or high Second Class), or a Bachelor's degree with a minimum average of A— (80% or First Class) in the final year's work. A candidate with background deficiencies in history may be required to register for a year as an unclassified student or to spend a year as a qualifying graduate student before being admitted to a degree programme.

#### Thesis Option

A student electing the thesis option will normally write a thesis of approximately 50,000 words, and must successfully defend this thesis in an oral examination. He will also be required to complete a graduate seminar in a field other than that of his thesis. Facilities are available for thesis work in Canadian history (particularly British Columbia and Canadian military history), and limited topics in other areas, such as intellectual, diplomatic, British, and Western American history. The University's McPherson Library has holdings in excess of 600,000 volumes, and graduate students may also be granted access to the Provincial Library and Archives, which include notable manuscript collections relating to western Canada and the northwestern United States.

#### Course-work Option

A student electing the course-work option will select four seminars from the following offerings; Seminar in American History, Seminar in British History, Seminar in Canadian History, Seminar in B.C. History, Seminar in Canadian Defence Policy, and Seminar in European History. In addition, a Seminar in Specialized Topics will be offered in some years, which may feature topics in historiography, diplomatic, intellectual, or western Canadian history.

In special circumstances, and with the consent of the department, the

candidate may make substitutions as follows:

(1) Directed Reading in history for one seminar course;

(2) A three unit course at the graduate level in a cognate discipline other than history for one seminar course;

(3) One Directed Reading course in history and one graduate course in a

cognate discipline for a maximum of two seminar courses.

The candidate will also write an extended research paper of approximately 12,000 words under the direction of the instructor of one of his courses within the department. This will be read and assessed by two members of the department in addition to the instructor giving the course. At the end of his course, the candidate will be orally examined in his general competence in the discipline of History.

#### General

All candidates for the M.A. degree must demonstrate a reading knowledge of French or some other language acceptable to the department to qualify for graduation. Language examinations will be administered in the months of October, January, and March each year.

Students are normally admitted for study beginning in September and must complete all requirements by April 15 to graduate in May. Part-time study is permitted, but the degree must be completed within five years of

the initial registration.

Although there are no formal residence requirements, residence is recommended.

#### Faculty and Major Fields of Interest

Harry J. Bridgman, M.A. (Queen's), Pre-Confederation Canada.

Brian W. Dippie, Ph.D. (Texas), Intellectual-cultural; Nineteenth Century U.S.

Charlotte S. M. Girard, Ph.D. (Bryn Mawr), Twentieth Century Diplomacy; Modern France.

James E. Hendrickson, Ph.D. (Ore.), British Columbia; American West. Sydney W. Jackman, Ph.D. (Harvard), Nineteenth Century Britain.

T. Jan Kupp, Ph.D. (Man.), New France.

Robert J. McCue, Ph.D. (Brigham Young), Sixteenth Century Europe.

John Money, Ph.D. (Cantab.), Eighteenth Century Britain.

Patricia E. Roy, Ph.D. (Brit. Col), Post Confederation Canada, British Columbia.

Reginald H. Roy, Ph.D. (Wash.), Military History; Canada.

Donald L. Senese, Ph.D. (Harvard), Nineteenth and Twentieth Century Russia.

W. George Shelton, Ph.D. (Penn.), Intellectual History.

Phyllis M. Sherrin, Ph.D. (York), French Canada; Canadian Intellectual and Social History.

David A. T. Stafford, Ph.D. (London), Twentieth Century Europe.

E. Patricia Tsurumi, Ph.D. (Harvard), Modern Japan.

Wesley T. Wooley, Ph.D. (Chicago), U.S. Diplomacy; Urban History.

# HISTORY IN ART

The Department of History in Art offers a programme leading to the

degree of Master of Arts.

The M.A. programme is designed to be completed in two years, although in exceptional circumstances the programme may be of shorter duration. In their first year students are expected to take four courses. History in Art 501, the basic course in methodology and the history of art history, must be taken by all students. In addition, if a student is primarily interested in Western art, he or she must take at least one course in Eastern art (Islamic, Indian, or Far Eastern). Similarly, if a student's primary interest is in Eastern art, at least one course must be in a field of Western art. The M.A. thesis is the focus of the second year's work.

The Department recommends highly that entering graduate students

The Department recommends highly that entering graduate students have a reading knowledge of at least one foreign language, preferably French or German. If the University offers courses in a language indispensable to their M.A. programme, they should be prepared to undertake

language training in addition to their normal course work.

### **Faculty and Research Interests**

Anthony Welch, Ph.D.

(Harvard)

Sherwood Fehm, Ph.D. (Yale)

Early Renaissance Italian painting;
Late Medieval and Renaissance art
and architecture; American painting.

Alan Gowans, Ph.D. (Princeton)

Architectural history; North American art and architecture; popular arts; parallel history.

Siri Gunasinghe, D.U. (Paris)

Buddhist and Hindu art and architecture of South and Southeast Asia;
Indian painting.

Ida K. Rigby, Ph.D. German Expressionist painting and (Calif., Berkeley) graphics; Modern painting.

Iranian painting; architecture of Muslim India; Islamic art and architecture.

# LINGUISTICS

The Department of Linguistics offers programmes of study and research leading to the degrees of Doctor of Philosophy and Master of Arts in the following areas:

- Theoretical Linguistics, especially as this applies to grammatical theory, phonological theory, experimental phonetics, psycholinguistics.
- 2. Applied Lingustics, especially as this applies to Canadian English, dialectology, lexicography, English for non-native speakers, languages of the Pacific Rim, and indigenous languages of the Northwest.

#### Faculty and areas of interest

M. H. Scargill, Ph.D. (Leeds) Canac F.R.S.C.

Geoffrey N. O'Grady, Ph.D. (Indiana)

Joseph F. Kess, Ph.D. (Hawaii)

Canadian English, Lexicography

Canadian Indian Languages and Austronesian languages Psycholinguistics Henry J. Warkentyne, Ph.D.

(London)

Barry F. Carlson, Ph.D. (Hawaii)

Thomas M. Hess, Ph.D. (Wash.) Thomas E. Hukari, Ph.D.

(Wash.)

Dialectology, Experimental Phonetics, and English as a Second Lan-

guage

Amerindian Languages

Amerindian Languages

Grammatical Theory and Phonology

# **MATHEMATICS**

The Department of Mathematics is authorized to offer graduate programmes leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics, Computing Science, Statistics, and Applicable Mathematics. During 1976-1977 and 1977-1978 the Department will accept students to begin work only in the programme in Applicable Mathematics described below. Students who registered in other graduate programmes in the Department prior to 1976-1977 are governed by the Department regulations in force at the time of their initial graduate registration.

### M.Sc. in Applicable Mathematics

This programme is designed to accommodate graduates in disciplines other than mathematics who have some background in mathematics (see below), who have an interest in solving problems which can be posed mathematically and who wish to develop further skills for solving such problems.

#### Admission

Students selected for the programme must be admissible to the Faculty of Graduate Studies with a degree in science, applied science or social science with at least a B average, and must have as minimum mathematical preparation the equivalent of second year undergraduate calculus and linear algebra courses.

Preference will be given to candidates who already have some relevant professional experience, particularly those who are actively engaged in

problem solving.

Further information concerning eligibility for admission or about the programme may be obtained from:

The Director, M.Sc. in Applicable Mathematics, Mathematics Department, University of Victoria, Victoria, B.C.

#### **Programme**

The programme consists of a thesis and participation in the Applicable Mathematics Seminar together with the following eight one-term courses: Mathematics 501A, 501B, 501C, 501D, 501E, 501F, 501G, and 501H. (For descriptions, see page 84.)

The focal point of the programme for a student is the thesis which will

The focal point of the programme for a student is the thesis which will require that significant progress be made in solving a practical problem which may be suggested by the student or chosen in consultation with

some group of users of mathematics.

Each student in the programme must be or become proficient in computer programming (a short introductory course will be provided where necessary).

#### Regulations

- A graduate student is governed by the Departmental regulations in force at the time of his initial graduate registration.
- 2. For each graduate student there shall be a Supervisory Committee of at least three members approved by the Faculty of Graduate Studies, one of whom shall be from outside the Department. The Committee shall recommend to the Department Head and then to the Faculty of Graduate Studies a programme of studies. For a thesis candidate the committee shall examine the thesis and conduct a final oral examination of the candidate on his thesis. For a non-thesis candidate the committee shall conduct both a written and an oral examination of the candidate on his discipline. In both cases, the final oral will be chaired by the Dean of Graduate Studies or his nominee. The Committee may conduct other examinations. The Department Head and the Committee shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.
- The student is responsible for familiarizing himself with other regulations as outlined in the University Calendar and the brochure of the Faculty of Graduate Studies.

#### Faculty and Fields of Research

Arne P. Baartz, Ph.D. (Ore.), Analysis.

Ian Barrodale, Ph.D. (Liverpool), Numerical Analysis, Operations Research, Computing Science.

Leon Bowden, Ph.D. (London), Heuristics.

William S. Bowie, Ph.D. (Waterloo), Computing Systems.

Stanley R. Clark, Ph.D. (Manchester), Computing Science, Simulation,

Ernest J. Cockayne, Ph.D. (Brit. Col.), Combinatorics.

Roger R. Davidson, Ph.D. (Florida State), Statistics.

Fernand E. Deloume, Ph.D. (U.S.C.), Applied Mathematics.

Byron L. Ehle, Ph.D. (Waterloo), Numerical Analysis, Computing Science.

William R. Gordon, Ph.D. (Calif., Santa Barbara), Linear and Multilinear Algebra.

W. Keith Hastings, Ph.D. (Tor.), Statistics.

Denton E. Hewgill, Ph.D. (Brit. Col.), Partial Differential Equations.

Lowell A. Hinrichs, Ph.D. (Ore.), Geometry, Topology.

Albert Hurd, Ph.D. (Stanford), Nonstandard Analysis, Dynamical Systems, Partial Differential Equations.

Stephen A. Jennings, Ph.D. (Tor.), Algebra.

Bruce R. Johnson, Ph.D. (Ore.), Mathematical Statistics, Probability.

D. Elizabeth Kennedy, M.A. (Brit. Col.), Algebra.

Walter P. Kotorynski, Ph.D. (Tor.), Differential Equations.

David J. Leeming, Ph.D. (Alta.), Approximation Theory.

Robert A. MacLeod, Ph.D. (Alta.), Number Theory.

Charles R. Miers, Ph.D. (Calif., Los Angeles), Functional Analysis.

Donald J. Miller, Ph.D. (McMaster), Algebra, Graph Theory.

Gary G. Miller, Ph.D. (Missouri), Topology.

Charles E. Murley, Ph.D. (Wash.), Homological Algebra, Abelian Group Theory

O. Phoebe Noble, B.A. (Brit. Col.), Mathematics Education.

Robert E. Odeh, Ph.D. (Carnegie Inst. of Tech.), Statistics, Computing

D. Dale Olesky, Ph.D. (Tor.), Numerical Analysis, Computing Science.

William E. Pfaffenberger, Ph.D. (Ore.), Banach Algebras, Operator Theory, Harmonic Analysis.

James Riddell, Ph.D. (Alta.), Number Theory.

Frank D. K. Roberts, Ph.D. (Liverpool), Numerical Analysis, Operations Research, Computing Science.

Earl D. Rogak, Ph.D. (Mich.), Functional Analysis, Partial Differential Equations, Optimal Control

Marvin Shinbrot, Ph.D. (Stanford).

H. Paul Smith, M.A. (Wash.), Mathematics Education.

Hari M. Srivastava, Ph.D. (Jodhpur), Analysis, Applied Mathematics, Mathematical Physics.

Pauline van den Driessche, Ph.D. (Wales), Applied Mathematics, Differential Equations.

# MUSIC

Apart from the regulations specified by the Faculty of Graduate Studies in the current Calendar, the Department of Music requires of students in musicology the following special qualifications:

#### M.A. AND PH.D. IN MUSICOLOGY

# Admission

An applicant is requested to send, along with official transcripts of previous college study, examples of his or her work in the field of music history, such as honours papers or Master's thesis, which will be returned.

# Language requirement

M.A. A good reading knowledge of German and French is required

before admission. Applicants with a reading knowledge of another foreign language may be accepted provisionally, but must demonstrate their profi-ciency in German and French to the Department by December of their first year of graduate study at the University of Victoria. A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization. Courses taken to fulfill this requirement are considered remedial, and units earned thereby will not be counted toward the course requirements.

Ph.D. Same requirements as above upon entering, but the student must also pass a reading examination in French and German before December

of his second year of attendance.

A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization.

#### Comprehensive examinations

Comprehensive examinations in Theory, History, and Musicology may be taken in December or April each year. Full-time M.A. students are required to complete these to the Department's satisfaction by the end of their first year in the programme. Part-time M.A. students will be advised during their first year in the programme when they should expect to complete these examinations.

# Ph.D. dissertation prospectus

A prospectus will be required for submission to the student's advisory committee and should include 1) a description of the research situation in the chosen field of study, including detailed, specific references to existing published studies, their scope and limitations; 2) a precise statement of the research problem or problems upon which the dissertation is to focus, and a summary of the proposed plan of study; 3) a description of the state of the primary source materials and their immediate availability; and 4) as an appendix, a selected but comprehensive bibliography (preferably annotated) of directly relevant books and articles.

#### M.A. Thesis

The thesis should be completed during the last term of residence.

#### Ph.D. Dissertation

This should be a significant contribution to original musicological research.

#### M.MUS. IN PERFORMANCE

It is preferable for an applicant to visit the department for an interview and audition in his performance medium. When that is impractical, a high quality tape recording must suffice. This should be of at least thirty minutes duration and present solo playing of two or more works in contrasting style. Acceptance via tape is always provisional pending audition in person upon arrival in September.

Acceptance for the M.Mus. in Performance requires specialization at advanced level in a specific performance medium (for example, trumpet, piano, voice.) Further growth as a soloist and ensemble participant is a degree requirement, formal evidence of which is demonstrated through the candidate's degree recital and in concerto or solo performances with the University Orchestra.

The candidate's individual programme is devised to accomplish this and to complement it with study of related areas, e.g. conducting, performance practices, composition, theory, music history, theatre, history in art, languages.

#### Faculty and areas of interest

George W. Corwin, D.M.A. (Rochester), director of performance programme, conducting, University chorus, University orchestra. study leave 1976-77.)

Boyde W. Hood, M.M. (Ball St.), trumpet, brass chamber ensembles.

Rudolf Komorous, Artist Diplomas (Prague), director of composition programme, theory.

Gordana Lazarevich, Ph.D. (Columbia), director of history and literature programme, director of graduate studies in music, music history, musicology.

Alejandro E. Planchart, Ph.D. (Harvard), music history, musicology, collegium musicum (1975-76).

Erich Schwandt, Ph.D. (Stanford), music history, musicology, collegium musicum.

Gerald Stanick, viola, chamber ensembles.

Phillip T. Young, M.Mus. (Yale), musical instrument history, chamber ensembles.

# PHILOSOPHY

The Department of Philosophy offers a programme of graduate study leading to the degree of Master of Arts. Students will concentrate mainly on the writing of a thesis, under the supervision of a member of the Department. Topics may be taken from the areas of Metaphysics, Epistemology, Ethics, Philosophy of Religion, Philosophy of Mind, Philosophy of Language, Social Philosophy and Political Philosophy. Normally a candidate is assigned no course work; however, from time to time a supplement of course work, fitted to individual needs and interests, might also be prescribed. Usually this would not exceed two courses. Admission to the M.A. Programme is restricted to those with an equivalent of First Class Honours standing in the Honours Philosophy Programme at the University of

#### Faculty

Kenneth W. Rankin, Ph.D. (Edin.), Thought and Action, Philosophy of Time.

Howard J. N. Horsburgh, B.Litt. (Oxon.), Philosophy of Religion, Ethics. John Woods, Ph.D. (Mich.), Philosophy of Logic, Philosophy of Language. Charles B. Daniels, D.Phil. (Oxon.), Philosophy of Mind, Ethics, Aesthetics, Ontology.

Eike-Henner W. Kluge, Ph.D. (Mich.), Mediaeval Philosophy, Frege & Wittgenstein, Metaphysics, Theory of Perception.

Charles G. Morgan, Ph.D. (Johns Hopkins), Philosophy of Science, Logic. Rodger G. Beehler, Ph.D. (Calgary), Political Philosophy, Philosophy of Law, Philosophy of Education.

Alan R. Drengson, Ph.D. (Ore.), The British Empiricists, Kant, Eastern Philosophy, Philosophy of History, Moral Psychology.

John M. Michelsen, Ph.D. (Wash.), Greek Philosophy, Phenomenology &

# **PHYSICS**

The Department of Physics offers programmes of study and research, leading to the degrees of M.Sc. and Ph.D. The graduate courses offered are

listed on pages 93 and 95.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion Astrophysical Observatory, the Victoria Geophysical Observatory, and the Patricia Bay Institute of Ocean Sciences. University of Victoria is one of a consortium of universities which operates the meson facility TRIUMF.

Astronomy and Astrophysics - Observational and theoretical studies which may be carried out in conjunction with the Dominion Astrophysical Observatory at Victoria.

Geophysics — Geomagetism and space physics, plasma studies, upper atmosphere physics.

Nuclear Magnetic Resonance - NMR studies of molecular properties in solids and liquids.

Nuclear Physics - Nuclear and particle theory, intermediate energy physics with the TRIUMF accelerator.

Physics of Fluids — Acoustics, gas dynamics and kinetic theory of gases.

Theoretical Physics — General relativity, nuclear and particle physics.

# Faculty and Major Area of Research

Walter M. Barss, Ph.D. (Purdue)	Acoustics
George A. Beer, Ph.D. (Sask.)	Experimental Nuclear and Particle Physics
J. Anthony Burke, Ph.D. (Harvard)	Astronomy and Astrophysics
Reginald M. Clements, Ph.D. (Sask.)	Plasma Studies
John L. Climenhaga, Ph.D. (Mich.)	Astronomy and Astrophysics
Fred I. Cooperstock, Ph.D. (Brown)	General Relativity and Astrophysics
John M. Dewey, Ph.D. (London)	Experimental Gas Dynamics

Harry W. Dosso, Ph.D. Geomagnetism and Space Physics (Brit. Col.) James P. Elliott, Ph.D. Gas Dynamics and Kinetic Theory (Stanford) of Gases Gerhart B. Friedmann, Ph.D. **Biophysics** (Brit. Col.) F. David A. Hartwick, Ph.D. Astronomy and Astrophysics (Tor) Robert E. Horita, Ph.D. Geomagnetism and Space Physics (Brit. Col.) Donald E. Lobb, Ph.D. (Sask.) Beam Transport Systems and Magnetic Studies Experimental Nuclear and Particle Grenville R. Mason, Ph.D. (Alta.) Physics Experimental Nuclear and Particle R. Michael Pearce, Ph.D. (Brit. Col.) Physics Howard E. Petch. Ph.D. Nuclear Magnetic Resonance in Solids and Liquids (Brit. Col.) Charles E. Picciotto, Ph.D. Theoretical Nuclear and Particle (Calif.) Physics Lyle P. Robertson, Ph.D. Experimental Nuclear and Particle (Brit. Col.) Physics Harbhajan S. Sandhu, Ph.D. Nuclear Magnetic Resonance in Solids and Liquids (Brit. Col.) Colin D. Scarfe, Ph.D. (Cantab.) Astronomy and Astrophysics Harry M. Sullivan, Ph.D. Upper Atmosphere Physics (Sask.) Jeremy B. Tatum, Ph.D. Astronomy and Astrophysics (London)Arthur Watton, Ph.D. Nuclear Magnetic Resonance in (McMaster) Solids and Liquids John T. Weaver, Ph.D. (Sask.) Geomagnetism and Space Physics Chi-Shiang Wu. Ph.D. Theoretical Nuclear Physics

# POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts.

A total of at least 15 units is required as follows:

- All M.A. candidates are quired to complete Poli, 505 Methods of Political Analysis (11/2 units) — offered in the Fall Term. In addition, all candidates except those enrolled in the Legislative Internship Programme are required to complete Poli. 585 — M.A. Seminar (1½ units) - offered in the Spring Term.
- 2. Thesis: A 3-unit thesis shall be required of each candidate.
- 3. Remainder of Programme:

(Western Reserve)

- (a) Regular M.A. Candidates: will be required to complete 9 additional units of course work. Students may take up to 3 units from undergraduate courses at the 300 or 400 level, and may take up to 3 units from reading courses (590).
- (b) Legislative Internship: M.A. candidates admitted to the Provincial Legislative Internship Programme may obtain 6 of the 15 units required upon completion of a comprehensive Intern Report and examination. Interns are required in addition to complete at least  $4\frac{1}{2}$  additional units at the 500 level. No more than 3 of these units may be earned from reading courses numbered at the 590 level.

# **Programme Summary**

Regular M.A. Option: Poli. 505 (September- December)	(1½)	Legislative Internship Opt Poli. 505 (September- December)	ion: $ (1\frac{1}{2}) $
Poli. 585 (January-April)	$(1\frac{1}{2})$	Poli. 580 (January-April)	(6)
Poli. 599 Thesis	(3)	Poli. 599 Thesis	(3)
Other courses with maximum of 3 units at 300-400 level, and a maximum of 3 units at 590 level (9)		Other 500-level course work, with a maximum of 3 units of 590 course work (4½)	
_			15 units
	15 units	-	

#### Faculty and Current Research Interests

- Howard L. Biddulph, Ph.D. (Indiana), Political Opposition and Dissent in Communist Politics, Political Socialization in Communist Politics, Marxist-Leninist Political Thought.
- Edgar Efrat, Ph.D. (Texas), Politics of Developing Nations, Sub-Saharan Africa.
- J. Terence Morley, B.A. (Dalhousie), Comparative Provincial Politics, Policy Process in British Columbia, Internal Politics of Bureaucratic Structures, Non-Marxist Socialist Thought.
- Richard J. Powers, Ph.D. (Claremont), International Relations, Foreign Policy, International Organizations.
- Norman J. Ruff, Ph.D. (McGill), B.C. Politics and Public Administration, Intergovernmental Relations.
- Mark H. Sproule-Jones, Ph.D. (Indiana), Public Choice Theory and Policy Evaluation, Urban and Environmental Policies and Management, Intergovernmental and Interdepartmental Relations.
- Neil A. Swainson, Ph.D. (Stanford), Natural Resources Management, Public Personal Recruitment and Management, Local and Regional Government.
- R. Jeremy Wilson, M.A. (Alta.), Canadian Electoral Behaviour, Theories of Political Perception and Attitude Formation, Natural Resource Policy.
- Walter D. Young, Ph.D. (Tor.), Politics and Communication, Canadian Parties and Political Movements, Political Leadership.

# **PSYCHOLOGY**

The department of Psychology offers programmes leading to the degrees of Master of Arts, Master of Science and Doctor of Philosophy.

Training leading to the Ph.D. degree is offered in several areas of experimental psychology, and in Neuropsychology and Social Psychology. The department also offers ancillary training (but not a degree) in clinical psychology. The Ph.D. student must specialize in one of the above three academic areas and consider any clinical experience as additional to his major academic training.

Initial inquiries regarding graduate studies in Psychology may be addressed to the Graduate Advisor, Department of Psychology. Application forms for admission and financial support may be obtained from the Secre-

tary of the Faculty of Graduate Studies.

# Faculty

Loren Acker, Ph.D. (Calif., Los Angeles)

Janet Beavin Bavelas, Ph.D. (Stanford)

Pam Duncan, Ph.D. (Wis.)

William Gaddes, Ph.D. (Claremont)

Bram Goldwater, Ph.D. (Bowling Green)

Gordon Hobson, Ph.D. (Alta.)

Ronald Hoppe, Ph.D. (Mich. St.)

Richard May, Ph.D. (Claremont)

G. Alexander Milton, Ph.D. (Stanford)

Lorne Rosenblood, Ph.D. (Ohio St.)

Frank Spellacy, Ph.D. (U. of Vic.)

Otfried Spreen, Ph.D. (Freiburg)

Louis Sutker, Ph.D. (Georgia)

Charles Tolman, Ph.D. (Wash.)

David Walker, Ph.D. (Iowa)

R. L. D. Wright, Ph.D. (Tor.)

# Major Area of Research

Experimental Child, Behaviour Modification: Clinical/Social

Social-Personality, Interaction, Cognition

Clinical-Developmental

Neuropsychology, Learning Disorders

Human Psychophysiology, Conditioning

Motivation/Alcohol and Personality

Social Influence, Psycholinguistics

Learning, Stimulus Preference

Childhood Socialization, Social Roles

Attitude Theories, Social Affiliation, Research Design

Neuropsychology, Clinical Psychology

Neuropsychology, Psycholinguistics, Perception

Neuropsychology

Experimental Psychology, Theory & Methods

Brain Processes

Animal Learning, Motivation & Conflict

# SOCIOLOGY

The programme leading to the Master's degree in sociology is designed to maximize options and flexibility for students as well as to reflect the diversity that characterizes the discipline. Courses of study are individually designed to fit student interests and supplement areas of sociology in which they may require additional work.

# 1. Programme of Studies

All students are required to complete a minimum of 15 units of prescribed calendar listings. Of these, 12 units must be at the graduate level. Other than in exceptional cases, only 3 of these graduate units will represent the student's thesis; the remainder being drawn from departmental listings in the calendar. All students are required to demonstrate competence in sociological theory (Soc. 500), the methodology of sociological research design (Soc. 511) and data analysis, as well as quantitative/statistical techniques (Soc. 510). Ordinarily such competence shall be demonstrated by successful course completion; however, the abilities and prior performances of entering students shall be considered in the planning of their programmes - both in terms of particular courses and the unit values required. In addition, students may be expected to participate in a departmental seminar as part of their degree programme.

Other listings are designed to facilitate the range of interests displayed by traditional and contemporary sociological inquiry (Soc. 530, 535, and 590). These may capitalize on the university's computer facilities; the library's Human Relations Area Files holdings; the department's small groups laboratory; and the British Columbia Provincial Archives. The range of such interests is illustrated by the current areas of interest declared by the sociology faculty (see below).

# 2. Length of Programme

Students may ordinarily expect to spend two years completing the Master's degree, although especially qualified students - an Honours degree in sociology with at least a B+ average in Sociology - may require as little as a year.

#### The Graduate Sociology Faculty and Current Areas of Interest

Donald W. Ball, Ph.D. (Calif., Los Angeles)

Elaine Cumming, Ph.D. (Radcliffe-Harvard)

Robert Hagedorn, Ph.D. (Texas)

Alan Hedley, Ph.D. (Ore.)

Daniel J. Koenig, Ph.D. (Illinois)

S. Charles Lazer, Ph.D. (Mich. St.)

Leonard M. Thornton, Ph.D. (Illinois)

T. Rennie Warburton, Ph.D. (London)

Roy E. L. Watson, Ph.D. (Tor.)

Stephen D. Webb, Ph.D. (Tennessee)

Elena S. H. Yu, Ph.D. (Notre Dame)

Family; sociology of sport; crosscultural analysis

Medical sociology; the life cycle

Formal organizations; industrial sociology

Methodology; formal organizations

Political sociology, deviant behaviour, social thought

Mathematical sociology; demography; human ecology

Social stratification; political sociology

Canadian society; religion

Social welfare institutions; occupations

Urban; criminology; methodology

Social psychology; sex roles; family

# THEATRE

1. Programmes in Graduate Studies

The Department offers three programmes in graduate studies:

M.A. in Theatre History

M.F.A. in Directing and Production

M.F.A. in Design and Production

2. Diagnostic Examination

A diagnostic examination will be given in September to all incoming students. All deficiencies must be eliminated by enrolment in the appropriate undergraduate courses or by other assignments suggested by the graduate faculty. These deficiencies will represent additional requirements for the student and must be eliminated before the student can enrol in the graduate-level courses in that area.

#### 3. Participation in Productions

All graduate students will be expected to work on departmental productions. Areas of activity will be designated by the graduate faculty in consultation with the student.

#### 4. Faculty Supervisors

Each student will be assigned a faculty supervisor who will assist the student in the development of his thesis or practicum.

#### 5. Comprehensive Examinations

Comprehensive examinations for M.A. and M.F.A. students will normally be held in October of each year.

# 6. M.A. in Theatre History: Requirements

- (a) A knowledge of all design areas at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (see above).
- (b) Theatre History 9 units. At least 6 units must be taken in the Theatre Department at the graduate level.
- (c) Directing 3 units.
- (d) Theatre 599 M.A. Thesis 6 units.
  - Written comprehensive examinations must be passed prior to student's registering in Theatre 599.
  - (ii) The M.A. comprehensive examination will emphasize theatre history but will also include the practical areas of the theatre.
  - (iii) The student will submit his thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.A. degree will probably require a minimum of two years.

The student will normally be required to be in attendance for at least one year.

#### 7. M.F.A. in Directing/Production: Requirements

- (a) A general knowledge of theatre history at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (See 2. Diagnostic Examination, above).
- (b) Competence at the B.F.A. level in all three design areas. (See 2. Diagnostic Examination, above.)
- (c) Directing, or Advanced Directing 3 units.
- (d) One course in Lighting, Costume or Scene Design 3 units.
- (e) Theatre History 3 units.
- (f) Theatre 598 M.F.A. Practicum 6 units.
  - Written comprehensive examinations must be passed prior to the student's registering in Theatre 598.
  - (ii) The M.F.A. comprehensive examination will emphasize the practical areas of the theatre but will include theatre history.
  - (iii) A full-length production will be decided upon in consultation with the student's supervisor and the graduate faculty.
  - (iv) The student will orally defend his practicum as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.F.A. degree will probably require a minimum of two years.

The student will normally be required to be in attendance for at least two years.

### 8. M.F.A. in Design/Production: Requirements

- (a) A general knowledge of theatre history at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (See 2. Diagnostic Examination, above).
- (b) Competence at the B.F.A. level in directing and in scenery, costume and lighting design. (See 2. Diagnostic Examination, above).
- (c) A good general knowledge of, and interest in, the visual arts, particularly European and North American architecture, painting, sculpture, and minor arts. (See 2. Diagnostic Examination, above).
- (d) Four graduate courses in design for the theatre 12 units.
- (e) One other graduate course in theatre 3 units.
- (f) Theatre 598 M.F.A. Practicum 6 units.
  - Written comprehensive examinations must be passed prior to the student's registering in Theatre 598.
  - The M.F.A. comprehensive will emphasize the practical areas of the theatre but will include theatre history.
  - The nature of the practicum will be determined in consultation with the student's supervisor and the graduate faculty.
  - iv) The student will orally defend his practicum as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.F.A. degree will probably require a minimum of two years.

The student will normally be required to be in attendance for at least two years.

#### Faculty and Current Areas of Interest

Barbara M. McIntyre, Ph.D. (Pittsburgh)

Carl Hare, M.A. (Alta.) (On leave of absence 1976-77.)

John Krich, M.F.A. (Yale)

Alan Hughes, Ph.D. (Birm.)

Harvey M. Miller, Ph.D. (Pittsburgh)

Irene Pieper, M.A. (San. Fran. St.)

William West

Giles W. Hogya, Ph.D. (Northwestern)

Theatre in Education; Children's Theatre; Child Drama.

Contemporary Theatrical Styles; Canadian Theatre; Children's Theatre; Shakespeare and the Elizabethan Theatre; Acting; Directing.

Acting; Directing; Popular Entertainments (Circus, Carnival, Hippodrama, Spectacle); Theatrical Styles and Conventions.

Victorian Theatre; Shakespeare in the Theatre; Elizabethan Theatre; Greek Theatre.

Elizabethan Theatre Production; The American Theatre; Acting; Directing.

The History of Costume; Costume Design.

Setting Design, Graphics.

Directing; Lighting Design; Children's Theatre; Creative Dramatics.

# **FACULTY OF LAW**

- F. Murray Fraser, B.A., LL.B. (Dalhousie), LL.M. (London), of the Bar of Nova Scotia, Professor and Dean of the Faculty.
- William H. Charles, B.A. (Sir George Williams), LL.B. (Dalhousie), LL.M. (Harvard), LL.M. (Mich.), Visiting Professor.
- Ronald I. Cheffins, B.A., LL.B. (Brit. Col.), LL.M. (Yale), of the Bar of British Columbia, Professor.
- Keith B. Jobson, B.A., B.Ed. (Sask.), LL.B. (Dalhousie), LL.M., J.S.D. (Columbia), Professor.
- Diana M. Priestly, B.A., LL.B. (Brit. Col.), M.L.L. (Wash.), Professor and Law Librarian.
- Lyman R. Robinson, B.A., LL.B. (Sask.), LL.M. (Harvard), of the Bars of British Columbia and Ontario, Professor.
- Terence J. Wuester, B.A. (Bethany Nazarene Coll.), M.A. (Missouri), J.D. (Kansas), LL.M. (Yale), of the Bars of Saskatchewan and Kansas, Professor.
- Frank S. Borowicz, B.A. (Loyola), LL.B. (Dalhousie), LL.M. (Harvard), Assistant Professor.
- Neil Gold, B.A. (York), LL.B. (Tor.), LL.M. (York), of the Bar of Ontario, Assistant Professor.

The Faculty of Law offers a three-year programme leading to the Bachelor of Laws (LL.B.) degree. The Faculty has been granted the status of "an approved law school" by the governing bodies of the legal profession in the various common law provinces. This accords the Bachelor of Laws degree of the University of Victoria the same status as that of other common law schools in Canada.

#### APPLICATION FOR ADMISSION

Application forms for first admission to the University or for re-registration, and applications for admission to the Faculty of Law are available from the Dean's office. All applications must be submitted by April 30th.

# REQUIREMENTS FOR ADMISSION TO THE FIRST-YEAR PROGRAMME

#### Regular Applicants

The Faculty of Law may admit a candidate who:

- presents proof that he has received, with standing satisfactory to the Faculty of Law, a degree from the University of Victoria or an equivalent degree from a recognized university; or
- presents proof that he has completed, with standing satisfactory to the Faculty of Law, at least the first three years (forty-five units) of a programme leading to a degree at the University of Victoria, or the equivalent at a recognized university.

In addition, each applicant must submit a Law School Admission Test score and satisfy such other requirements as may be prescribed from time

NOTE: Since the number of candidates who meet the minimum requirements for eligibility far exceeds the number of places available, it should be understood that eligibility does not guarantee admission. Admission is decided on a competitive basis taking into account, principally, a candidate's pre-law academic record and Law School Admission Test score.

# **Special Applicants**

The Faculty of Law may admit a limited number of applicants who have demonstrated by the length and quality of their non-academic experience an equivalent in substance to formal education. Applicants in this category normally will be restricted to residents of British Columbia, the Yukon and the Northwest Territories.

Special applicants normally will have reached the age of twenty-six on or before September 1 of the year for which they seek admission. Applicants are required to write the Law School Admission Test. Letters of assessment

and interviews may also be required.

# **Native People**

The Faculty of Law is anxious that the number of native Indians and Eskimos among the ranks of the legal profession increase substantially and, accordingly, encourages enquiries and applications from Native People.

However, the Faculty is concerned that candidates not invest a substantial amount of time, money and effort only to find that they were inadequately prepared for the rigours of law school. Hence, the Faculty fully endorses the Programme of Legal Studies for Native People conducted by the Native Law Centre of the University of Saskatchewan. It is highly desirable that those Native candidates whose records are not competitive within the Regular Applicants category enrol in this "head start" programme. Considerable weight is placed upon the evaluation submitted by the director of the programme. Each candidate in this category is required to submit a Law School Admission Test score.

#### GENERAL INFORMATION

#### 1. Academic Year

The academic year in the Faculty of Law extends for approximately thirty effective teaching weeks exclusive of examination periods and each student is under instruction or supervision by the teaching staff for approximately fifteen hours per week in class sessions, seminars, tutorials and legal writing or research projects.

# 2. Grading

	Grade	Grade Point Value	
Passing Grades	A+ A A—	9 8 7	First Class
	B+ B B-	6 5 4	Second Class
	C+ C D	$\begin{bmatrix} 3 \\ 2 \\ 1 \end{bmatrix}$	Pass
Failing Grade	F	0	
Temporary Grade	*DEF	N/A	Deferred examination granted

\*DEF - used only for courses in which a deferred examination has been granted because of illness or other special circumstances.

# 3. First Year Programme — Standing

Standing in the First-Year Programme shall be granted when a student passes all of the required courses, and either:

- a) obtains a grade of "C+" or better in courses representing at least 9 units of the required programme, or
- b) obtains a grade point average of 3.0 in the required programme.
- 4. First Year Programme Supplemental Examinations
  - a) Where a student does not achieve standing under 3 above, but attains a grade point average of at least 2.0, and has passed at least three courses, the student may write Supplemental Examinations in not more than two courses representing not more than six units, in order to attain the standing required.
  - b) Where a student is entitled to write Supplemental Examinations under a) above, the Faculty, where necessary, may designate the courses in which the student may write Supplemental Examinations.
- c) Supplemental Examinations shall not be written in courses where a student has attained a grade of "C+" or better.

### Special Examinations

The Faculty may authorize the writing of Special Examinations or the submission of documentation in satisfaction of course requirements to achieve standing under Regulation 3, where a student's ability to write or complete an examination or other academic requirement has been affected by illness or other special circumstances.

In considering such cases, the Faculty will require the submission to the

Dean of a medical certificate or other documentation.

Students will be advised in writing with respect to procedures to be followed in such cases.

# PROGRAMME REQUIREMENTS

# First Year

All 100-level courses are compulsory for all students. While the courses are shown as full year courses, an attempt is made to achieve certain academic objectives by commencing courses at different times throughout the first term and by varying the number of hours per week allotted to each course from time to time.

#### Second Year

The curriculum and regulations for Second Year are under preparation and will be available at registration in September.

### **COURSES**

#### LAW 100. (3) The Constitutional Law Process

This course deals with the basic framework of the Canadian constitutional system and illustrates that the constitution is the skeletal framework

within which the legal system functions.

The function of a constitution, the main characteristics of constitutions and Constitutional Law, entrenchment, amendment, the nature and structure of the B.N.A. Act, the division of powers, concurrency in a federal state, the sources of Canadian Constitutional Law, executive power, legislative authority, delegation, the role of the judiciary, civil liberties, developing issues in Constitutional Law.

Full year course

75 hours

#### LAW 102. (2) The Criminal Law Process

The course is an introduction to Criminal Law and its process as a means of sanctioning prohibited conduct. Attention is directed to the following matters:

- The reporting of crime including some discussion of the common characteristics of offenders and offences.
- The role of the police and the prosecutor in the pre-trial portion of the process including such matters as arrest, search and seizure, and the discovery of evidence.
- The aims and purposes of the Criminal Law and the role of the lawyer in the Criminal Law process.
- 4. The substantive Criminal Law including the ingredients of criminal offences and the application of the various defences which are available.
- Theories of punishment and practices of disposition and sentencing of offenders.

Students may be asked to spend up to ten hours in a field experience either in the courts, with police, or in corrections. Students are required to keep a journal in connection with this part of the course.

Full year course

60 hours

#### LAW 104. (2) The Law, Legislation and Policy: Family Law

The course provides an understanding of the importance of legislation in the legal process. Consideration is given to the ways in which law reform may be achieved. An attempt is made to illustrate the need for and value of interdisciplinary research in certain areas of the law and the potential contribution of other professions in the solution of "legal" problems.

Students should gain an appreciation of how a statute is created, including the basic underlying policy decisions upon which it is based, and the problems faced by the draftsmen in translating general ideas into specific unambiguous language. There is an examination of the rules of interpretation and their use in judicial interpretation of statutes. The course should develop an appreciation for the appropriate use of language in legal work of all types.

From time to time different areas of substantive law will be used to achieve these objectives. In 1976-1977 consideration will be given to a number of areas of Family Law which have received critical attention

recently by the courts, the legislatures and law reform bodies.

An attempt will be made to provide a perspective of the operation of the law within and upon the family unit. Specific topics will include protection of children, wardship, support obligations, and family property.

Students may be asked to prepare memoranda outlining policy objectives for proposed legislation. In co-operation with the Legislative Counsel of the Province, students may be required to prepare draft legislation.

Full year course

60 hours

### LAW 106. (2) The Legal Process

The Legal Process seeks a perspective of the processes of decision-making throughout the legal system by examining its major institutions and the fuction of substantive and procedural law within them. It attempts to provide first-year students with a transactional "overview" of their new discipline in its totality. It also provides a background for courses in the second and third year programme.

This course introduces students to the institutional structure of the Canadian legal system and, at the same time, provides an analysis of the role of law in society. The course will have a variety of components, namely historical, institutional, procedural and philosophical.

The role of law in society, the function of the legal profession, the development of the legal system, the reception of English law in Canada, the contemporary legal system in British Columbia, the structure of the courts, problems of fact-finding and evidence, stare decisis, sources of law, the legislative process, administrative tribunals, an introduction to jurisprudential concepts, future trends with respect to the role of law in society, including law reform, legal services, the legal profession, access to the law.

Students are required to complete a number of written assignments. Research topics are integrated with the areas of substantive law covered in a number of the first-year courses. The use of various research tools, including the computer, is considered. The major objectives of these assignments are to introduce students to source materials commonly used by lawyers, to acquaint students with accepted principles pertaining to proper citation in legal writing, and to develop a degree of proficiency in legal writing and research.

Full year course

60 hours

# LAW 108. (6) The Private Law Process

This course concentrates upon some of the basic rules of processes which regulate the relationships between private citizens. There is an attempt to integrate and interrelate some of the basic concepts normally covered in such courses as Contracts, Property and Torts. The course includes an overview of these areas, emphasizing their similarities rather than their differences, while at the same time students are expected to acquire substantial knowledge in each of these subjects. It presents problems in a form more closely resembling the way they occur in practice and everyday life. An attempt is made to introduce students to basic private law remedies and the use of the judicial process, arbitration and other methods of dispute settlement. With the assistance of audio-visual techniques, students participate in exercises designed to develop the skills of interviewing, counselling and negotiating at an early point in the programme.

This course is primarily concerned with the following subject areas:

#### 1. Contracts

This is a study of the basic principles of the law of contract, the underlying policy considerations, the historical development of such principles and the contemporary phenomena of contracts in society.

Contracts under seal, formation of simple contracts, written contracts and memoranda, rights of third persons, quasi-contract, mistake, interpretation, performance of contracts including conditions, failure of consideration, frustration, present and anticipatory breach, illegality, remedies, and modern statutory developments.

# 2. Torts

Consideration is given to the manner in which the law distributes losses from injuries to personal, proprietary and economic interests among members of society.

Intentional interference with the person, land and goods, negligence, occupier's liability, strict liability, nuisance, the role of insurance,

assessment of damages.

# 3. Property

This is an introduction to the concepts that lawyers use in dealing with competing interests in land, chattels and other forms of wealth. The concept of "property" is examined as are the concepts of "possession" and "ownership" and the consequences following from these concepts.

Personal property: acquisition of title, finder's law, gifts, bailments, liens, pledges, an introduction to the law of chattel mortgages and conditional sales, problems in the transfer of personal property.

Real property: historical and conceptual analysis of interests in land, concurrent ownership, future interests, the torrens system.

Contracts, Property and Torts are offered as separate elements of The Private Law Process. Students consider concepts common to two or more of the subject areas by reference to materials prepared by the form to six faculty members who are teaching The Private Law Process.

Full year course

200 hours

# OTHER PROFESSIONAL **PROGRAMMES**

# CHILD CARE PROGRAMME

Christopher D. Webster, B.A. (Brit. Col.), M.A. (Queens), Ph.D. (Dalhousie), Professor and Programme Director.

# PROFESSIONAL ADVISORY COMMITTEE

- Mr. Vic Belnap, Superintendent of Child Welfare, Provincial Department of Human Resources
- Mr. T. D. Bingham, Executive Director of Long Range Planning and Social Research, Provincial Department of Human Resources
- Mr. Ivan Carlson, Assistant Regional Director, Provincial Department of Human Resources
- Mr. C. J. Curtis, Director, Cedar Lodge Residential Centre
- Dr. Charles Gregory, Psychiatrist, University Health Services.
- Dr. A. A. Larsen, Chairman, Community Care Facilities Licensing Board, Provincial Department of Health
- Mr. J. B. McMahon, Director of Nursing, Glendale Lodge Hospital
- Mr. John Noble, Director of Social Services and Income Security Provisions, Provincial Department of Human Resources
- Mr. Orla J. L. Petersen, Director of Staff Development Division, Provincial Department of Human Resources
- Mr. Cliff Spence, Director of Personnel, Provincial Department of Human
- Mr. John Walsh, Superintendent of Integrated and Supportive Services, Provincial Department of Education
- Dr. John M. Dewey, Dean of Academic Affairs, University of Victoria
- Dr. William H. Gaddes, Professor, Department of Psychology, University of Victoria
- Dr. Barbara McIntyre, Professor, Department of Theatre, University of Victoria
- Dr. Roger A. Ruth, Associate Professor, Faculty of Education, University of Victoria
- Dr. Brian Wharf, Professor, School of Social Welfare, University of Victoria
- Ms. Barbara M. Williams, Director, University of Victoria Day Care Centre.

The Child Care Programme offers a programme of study leading to:

- The B.A. with an emphasis in Child Care, which entails an academic programme integrated with a certain amount of practical experience;
- The Diploma in Child Care (described in more detail below), which is given in final recognition of academic achievement and satisfactory performance in the practica.

# BACHELOR OF ARTS WITH AN EMPHASIS IN CHILD CARE

The B.A. with an emphasis in Child Care is a four-year 60-unit programme consisting of an introductory first year, followed by three years in the Programme itself. Students are therefore not formally admitted to the degree programme until their second year.

Within the basic academic requirements of the degree programme, students have considerable freedom in course selection. The practica requirements, which are normally met through volunteer or paid positions (usually in the summer months) in settings throughout the Province, do not carry academic credit towards the degree.

# ADMISSION PROCEDURES

Enrolment in the Child Care Programme is limited by the availability of practicum opportunities. Students are selected on the basis of personal suitability as well as academic standing. Interviews with the Director or his representative will normally be required. Students wishing an interview before April 30 should contact the Director.

- Students transferring from other Post-Secondary Institutions must submit an Application for Admission to the University to the Director of Admission Services by April 30.
- Returning Students (both those seeking internal transfer from another faculty and those previously enrolled in the Programme) must submit an Application for Re-Registration to the Records Office by April 30.

Students who register or re-register as students in the Child Care Programme will be expected to have completed a minimum total of three months of approved practica before commencing the third year of the Programme, and a minimum total of six months of approved practica before commencing the fourth year. The Director reserves the right to refuse students permission to proceed in the Programme if they have not completed appropriate practica.

Prospective students who are not Canadian citizens are cautioned that government hiring policies may present difficulties for them in meeting

these practical experience requirements.

#### **BASIC PROGRAMME**

The following academic programme is designed to provide a basic liberal arts education together with specialized practical training. There is considerable flexibility for electives.

#### First Year

English 115, and 121 or 122

Psychology 100

Sociology 100; and 6 units of elective courses.

#### Second Year

Child Care 200

Psychology 335 or Education 305; and 9 units selected in consultation with the Director.

Examples of suitable elective courses are:

Arts and Science Anthropology 100 or 200 level course

> Bacteriology 101 Biochemistry 201

Biology 150, or any 200 level course

English — a 200 level course Linguistics 100, 250 or 370 Mathematics 151 and 102 Philosophy 100 or 269

Psychology 220, 230, 240, 250, or 311 and 312

Education Art Education 100

Education 200

Music Education — a 100 or 200 level course Physical Education — a 100 or 200 level course

Fine Arts Music 100 or 200

Theatre 181 or other 100 or 200 level course

Visual Arts 100 or 200 level course

Social Welfare Social Work 200

### Third and Fourth Years:

- (1) Seminar in Child Care Problems (Child Care 460).
- (2) 12 or more units chosen so as to include the courses specified for at least two of the following areas of specialization:
  - (i) Study and treatment of Mentally Handicapped Children.

Required: Education 407 (The Exceptional Child) 11/2 units Education 409C (The Mentally

Retarded) 11/2 units Psychology 450 (Mental Deficiency) 3 units

(ii) Study and treatment of Emotionally Disturbed Children.

Required: Education 407 (The Exceptional Child) 1½ units

Education 409E (The Emotionally Disturbed) 11/2 units Psychology 415 (Human Neuropsychology) 3 units

Psychology 430 (Abnormal Psychology) 3 units

(iii) Study and treatment of Neurological and Learning Handicaps. Required: Education 415 (Diagnosis and Remedia-

tion of Learning Difficulties Psychology 415 (Human Neuropsychology) 3 units

3 units

(iv) Study and treatment of Severely Dysfunctional Children.
 Required: Psychology 415 (Human Neuropsychology) 3 units
 Psychology 430 (Abnormal Psychology) 3 units

(v) Care of Children in Cross-Cultural Conflict.

Required: Anthropology/Sociology 335 (Minority and Ethnic Group Relations) 3-units

Anthropology 339 (Indians of the Pacific Northwest) 3 units

(vi) Family Care.

Required: Education 316/317 (Verbal and
Nonverbal Communication) or Education
417 (Helping Relationships) or Social
Work 301 (Interpersonal Communication) 3 units
Sociology 305 (Sociology of Families and
Households) or Child Care 300
(Law and Social Service) 3 units

\*\*(vii) Pre-School Day Care

Required: Sociology 304 (Interaction and Socialization) or Sociology 305 (Sociology of Families and Households)

Education 440 (Early Childhood Education)

Education 441 (Research and Programme Development in Pre-School Education)

1½ units

(viii) Care of Children and Adolescents in Conflicts with the Law.
 Required: Child Care 300 (Law and Social Service) 3 units
 Sociology 301 (Deviance and Social Control) 3 units

- (3) 15 units (or the balance required to total 30 units) of electives chosen in consultation with the Director.
  - \*\*In consultation with the Director, the student can include in his programme of electives all courses necessary for licensing as a Pre-School Day Care Supervisor by the Comumnity Care Facilities Licensing Board of the Provincial Government. It should be borne in mind, however, that such licensing is not a primary goal of this area of specialization.

### **PRACTICA**

Practical experience is an essential part of the education of a Child Care Counsellor, and normally involves a period of full-time employment each year of the Programme at one or more of the approved Child Care Centres. A student entering the Programme with previous experience may be given practicum credit for one-third of this time, up to a maximum of 9 months for a fourth year student, 8 months for a third year student, and 7 months for a second year student.

# STATEMENT OF ACHIEVEMENT

On successful completion of the first and second years of the programme, or equivalent, plus a minimum of 8 months of successful full-time experience in agencies on the Programme's list of approved Child Care Centres, a Statement of Achievement may be issued by the Director of the Programme.

Students with a Bachelor's degree can obtain similar status by completing at least one course in Child Development (Psychology 335 or Education 305), Child Care 200 and Child Care 460, and at least 8 months of approved practical experience in recognized agencies.

# DIPLOMA IN CHILD CARE

The Diploma in Child Care signifies that the holder not only has completed the child study required for the B.A. with emphasis in Child Care, but also has accumulated a broad experience in applying this academic study to the specific problems of work in child care agencies. The Diploma is available to the following categories of students:

- Students completing the degree of Bachelor of Arts with emphasis in Child Care at the University of Victoria.
  - (a) Training: The completion of the four-year Bachelor's programme in Child Care and completion of a minimum of 16 months of successful full-time practical experience in agencies approved by the Director as providing a variety of experience related to the student's areas of specialization.

- (b) Recommendation: On the student's completion of the above training, the Director and an examining committee will evaluate the student's academic achievement and all reports from agencies where he has interned. When the Director is satisfied that all requirements in Child Care have been met, he will recommend that the Senate grant the "Diploma in Child Care."
- 2. Students completing other degrees at the University of Victoria.
  - (a) Training: The completion of a Bachelor's degree and concurrent or subsequent completion of the 30 units of course work specifically required in the Child Care Degree; field experience as required for enrolment and continuation in the Child Care degree programme; and completion of a minimum of 16 months of successful full-time practical experience in agencies approved by the Director as providing a variety of experience related to the student's areas of specialization.
  - (b) Recommendation: as above.
- Students who hold four-year Bachelor's degrees from the University of Victoria or similar institutions.
  - (a) Experience: A minimum of six months of successful full-time practical experience in agencies approved by the Director is a prerequisite to enrolment in the Diploma programme for students in this category.
  - (b) Training: The completion, or prior completion, of the 30 units of coursework specifically required in the Child Care Degree and completion of 16 months of successful full-time practical experience in agencies approved by the Director as providing a variety of experiences related to the student's area of specialization. Not less than 15 units of University of Victoria courses approved by the Director and not less than 8 months of practical experience must have been completed after enrolment in the Diploma programme.
- (c) Recommendation: as above.

### **COURSES**

#### C C 200. (3) Introduction to Child Care

An introduction to the role of the child care counsellor. Topics will include Canadian and other models of agency services to children, inter-agency communcation and cooperation, legal status of children and legal liability of the child care worker, work and work-training opportunities, observation skills and planning for behaviour changes, facilitating relationships with and between children, curriculum activities for play, therapy, and interest and intellectual development, and such management concerns as budgeting and accounting, nutrition and menu planning, intra-agency staff relationships, and staff timetabling. The course will also include a brief examination of the child care counsellor's role in relation to each of the areas of specialization included in the Programme. Open to students in any one of the first three years.

# C C 300 (Social Work 300). (3) Law and Social Services

The objective is to provide students in Child Care and Social Welfare with an understanding of the Law as an expression of social policy, and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts, with special reference to laws affecting children; the organization of legal services and the legal accountability and liabilities of social workers, child care workers, and others in the social service field.

(May not be offered in 1976-77.)

(3-0; 3-0)

# C C 310. (3) Theoretical and Practical Approaches to Child Care

Following a number of introductory lectures on the importance of theoretical conceptions in child care, seminars will be introduced to permit students to explore the application of these concepts to problems faced by children in their care.

(May not be offered in 1976-77.)

(2-2; 2-2)

# C C 460. (3) Seminar in Child Care

A study of current theories and practices in Child Care. Topics will include childhood personality development, both normal and pathological, possible therapeutic treatment methods, in-service training, management problems, budgeting, space and long-term planning. A graduation essay will be required. Open to students in their fourth year of the Child Care Programme, and to other students with permission of the Director.

(3-0; 3-0)

# SCHOOL OF NURSING

Isabel MacRae, B.S., M.A. (Columbia), Ph.D. (New York), Professor and Director of the School.

The School of Nursing offers a programme of studies leading to the degree Bachelor of Science in Nursing (B.S.N.) for nurses currently registered to practise in British Columbia.\* The curriculum is planned to assist the nurse to develop an increased ability to function effectively and interdependently with other professionals in a multidisciplinary health care system. The programme includes academic courses and clinical experience under faculty supervision; three nursing courses will be offered in September, 1976.

See page 8 for application procedures. Applications are due by April 30.

#### ADMISSION REQUIREMENTS

Only nurses currently registered in B.C.\* are admissible to the programme. An average of 500 on the Canadian Nurses' Association Testing Service examination, or its predecessor for initial registration, is expected.

Preference will be given to those who have had previous university experience with courses in social and behavioural sciences. Students should realize that they will enter classes with others who have had two years of recent university experience upon which to base current learnings. It is strongly recommended, and may be required, that introductory courses at the first or second year level be taken in Biology, Mathematics, Sociology and Psychology, prior to application to the School of Nursing.

# PROGRAMME REQUIREMENTS

Students will be required to complete a minimum of 30 units of course work at this University, in approximately two years of full-time study, for not more than six years of part-time study. They will be expected to devote at least one year to full-time study. In addition, to fulfill University requirements for graduation, students must meet the English requirement as set forth on page 11 of the Calendar. With faculty guidance, students will be encouraged to choose appropriate alternatives from among courses offered in the various departments of the University which meet programme requirements.

### PROGRAMME OF STUDIES

All courses taken for credit toward the B.S.N. degree will be at the level of 300 and above.

#### Year Three

Science Sociology Psychology	3 units 3 units 3 units	Chosen in consultation with the Director
Nursing 301	3 units	
Nursing 302	3 units	
Nursing 390	1-3 units	

#### Year Four

(Courses are in the process of development and/or negotiation.)

Learning Process	11/2 units
Management Process	1½ units
Health Care System	3 units
Research	3 units
Nursing: Directed Studies	3 units
Elective	3 units

# **COURSES**

Courses offered by departments other than the School of Nursing are described under the appropriate heading in the Calendar. Students should note carefully any departmental prerequisites\* for courses.

\*Nurses whose application for B.C. registration is in process may also apply.

#### NURS 301. (3) Scientific Method in Nursing

A study of the components of problem solving and review of psychological, sociological and physiological factors considered in application of the scientific method to nursing, (e.g. need hierarchy, role fulfillment, coping behaviours; exploration of the significance of deviation from normal patterns; resouces available within the patient and his environment for the improvement of current health status, or for resolution of grief in the event of chronicity or death for self or significant other). The relationship between theory and students' current or previous clinical experiences will be emphasized. Tests, written care plans and term papers will be the basis for grades

Corequisite: Nursing 302.

#### NURS 302. (3) Clinical Studies in Nursing

A practicum during which students apply the scientific method in situations which require extended guidance and/or intervention for the improvement of health status, such as renal dialysis, congenital anomaly, rehabili-tation or non-institutionalized chronicity. Grades will be based upon achievement of clinical objectives, and written assignments.

Corequisite: Nursing 301.

(1-6; 1-6)

(3-0; 3-0)

#### NURS 390. (1-3) Directed Studies

The purpose of this course is to facilitate transfer of students to this School from other institutions.

\*If prerequisites cannot be met, students are advised to consult with the appropriate departmental chairman.

# SCHOOL OF PUBLIC ADMINISTRATION

G. Neil Perry, B.A. (Brit. Col.), M.P.A., A.M., Ph.D. (Harvard), LL.D. (Brit. Col.), Professor and Director of the School (to June 30, 1976).

Thomas A. Lambe, B.A.Sc. (Brit. Col.), M.S., Ph.D. (Stanford), Associate Professor.

- J. Barton Cunningham, B.A. (Brigham Young), M.P.A., Ph.D. (South. Calif.), Assistant Professor.
- H. Campbell L. MacDonald, B.A.Sc. (Brit. Col.), M.B.A. (West. Ont.), Part-time Sessional Lecturer (1975-76)

Jonathan S. Monat, B.S. (Calif., Los Angeles), M.S. (San Diego St.), Ph.D. (Minnesota), Part-time Sessional Lecturer (1975-76).

Hugh C. Wilkinson, B.Comm. (Brit. Col.), M.B.A. (Wash.), M.Sc. (Cranfield), Part-time Sessional Lecturer (1975-76).

#### MASTER OF PUBLIC ADMINISTRATION PROGRAMME

The School of Public Administration offers a course of inter-disciplinary studies leading to the degree of Master of Public Administration. Designed to assist students to acquire an ability to cope with problems rather than simply a capacity to perform an existing, complex function or task, the general thrust of this introductory programme is oriented towards the future needs of professional practitioners.

Admission: The normal admission requirements of the School of Public Administration for the M.P.A. programme are: an undergraduate degree in any discipline from a recognized university, or its equivalent, with an academic standing that is acceptable to the School. In general, this would mean either a second-class standing or better in the final two years of the undergraduate degree, or other evidence that the candidate can be expected to complete the graduate programme successfully.

Because the M.P.A. programme is open to students from a broad range of disciplines, the School anticipates applications from persons with undergraduate backgrounds in such varied fields as political science, economics, business administration, philosophy, history, social work, engineering, public health and other subjects in the social and physical sciences and humanities. Although there is no formal requirement with respect to undergraduate courses, students will find it helpful to come to the School with some preparation in the social sciences, as well as in the nature of Canadian social and political structures and processes, a basic preparation in economics and statistics, a familiarity with computer programming, and some evidence of a capacity to perform acceptably as a professional practitioner. Preparatory course work (or auditing) may be recommended in those instances where the lack of an adequate background is judged likely to be a handicap for the student.

### **PROGRAMME OF STUDIES**

Each candidate for the degree of Master of Public Administration is permitted to design, with a faculty advisor, a study plan appropriate to the student's career plans and previous experience. The degree of M.P.A. is awarded upon the satisfactory fulfillment of the approved study plan and, in some cases, an internship. The programme of studies normally requires two years of full-time study but students admitted under the Mid-Career Option — described later — can meet the requirements in less time.

In the regular programme, each study plan normally comprises thirty units (at least eighteen of which must be at the graduate level) and

consists of:

- (a) a set of five, required 'core' courses (15 units), at least two of which must be taken in the first year — if a student can demonstrate proficiency in a 'core' course, an elective may be submitted;
- (b) electives (12 units):
- (c) a report requirement (ADMN 599, 3 units); and
- (d) an internship requirement.

### Report requirement:

In place of a thesis, every M.P.A. candidate is required to prepare a report - within a stipulated time-frame, embodying the results of the student's investigation of an issue or designated problem. The student is expected to meet the deadline and to present and defend the report before a faculty panel; whose evaluation rests, among other things, on the adequateness of the analytical methodology employed, the identification of the various courses of action which might be considered, and on the merits of the student's own recommended policy.

# Internship requirement:

An internship requirement for candidates without previous professional experience is an important element in the M.P.A. programme. This requirement can be served during the summer months between the first and second years, or after the required course work has been consummated, or at other times with the consent of the Director of the School. Students are encouraged to find their own placements, but the School will participate both in arranging suitable internships and in providing any necessary liaison or monitoring services.

### Language requirement:

Normally there is no language requirement for the M.P.A. degree, but, when proficiency in a particular language — in addition to English — is a prerequisite for the student's professional career aspirations, up to six units of relevant course work from the twelve units of electives may be taken for that purpose.\*

### Mid-Career Option:

There are points in a professional practitioner's career at which it is timely to seek further academic training. Often such a point arises when impending changes in kind and level of repsonsibility renders a period of academic broadening useful for the individual concerned. The Mid-Career Option, which normally requires the completion of eighteen units of advanced work, is designed to meet the needs of the well-prepared student who has both a good background of academic preparation and significant professional experience — as represented by at least three years of acceptable administrative or professional work.

In the Mid-Career Option, each study plan normally consists of:

- (a) graduate courses (15 units) clustered around the relevant 'core' courses; and
- (b) the report requirement (ADMN 599, 3 units).

Students contemplating entry into the School of Public Administration should confer with the Director of the School as early as possible for guidance in planning a programme of study and for information about course offerings.

\* The Division of Continuing Education also provides a diploma course of studies leading to the development of oral and written competence in the French language.

# **GRADUATE COURSES AND SEMINARS**

#### "CORE" COURSES

### ADMN 500. (3) Quantitative Analysis

The aim of the course is to acquaint the student with the uses and limitations of formal analysis in making decisions, and to develop the student's capability to use, understand, and evaluate statistical data and representations. Topics surveyed include: statistical decision theory (Bayesian); the logic and practice of computer simulation of models and the role of the administrator in choosing a model, supplying inputs and in interpreting outputs; sample surveys; optimizing methods and their possible application to problems in the public sector.

# ADMN 502. (3) Economic Analysis

The purpose of this course is to assist the student to acquire a greater competency in assessing the economic effects of governmental regulations and policies. The course involves a review of microeconomic and macroeconomic reasoning as applied to public issues, policies, and programmes; cost benefit analysis; urban and regional economics; economic development, monetary and fiscal policy; "incomes" policy and other contemporary topics.

#### ADMN 504. (3) Political Analysis

The purpose of this course is to assist the student to devise a systematic framework for explaining, predicting, and trying to plan outcomes of action by public authorities. The course involves an examination of the various ways of determining objectives for the public sector and the development of policies for their achievement including the role of political parties, interest groups, administrators, agencies, the judiciary and legislation in evolving and interpreting the public policy.

The requirements of this course for 1976-77 can be met in whole, or in part, by the completion of Political Science 535 or Political Science 516.

#### ADMN 506. (3) Organizational Analysis

The aim of this course is to review topics treated under organization theory from the standpoint of their prospective relevance to institutions in the public sector. The course will examine: the development and use of systems for communicating information about organizational goals, results and status to various decision-making points in an organization; individual motivation in relation to organizational purposes and the means by which these can be brought into agreement; and structures designed to accomplish the stated purposes; the functions and responsibilities of general management and the problems that affect the managerial experience of the organization.

The requirements of this course for 1976-77 can be met in whole, or in part, by the completion of Education 533, Political Science 550 or Sociology 530.

#### ADMN 508. (3) Policy Analysis

The purpose of this seminar is to give the student practice in analyzing case material and evaluating the decision-making processes employed therein. Students are involved in small group (Task Force) investigations of contemporary policy issues facing decision-makers in the public sector.

#### THE REPORT REQUIREMENT

ADMN 599. (3) Report

# SECOND YEAR SEMINARS AND WORKSHOPS

# ADMN 521. (11/2) Management of the Public Enterprise

Among the topics examined from time to time in this seminar are: systems planning in the public sector (Planning, Programming and Budget Systems; Management by Objectives), issues in personnel management and labour relations, and financial management such as the evaluation of public investment proposals.

ADMN 522. (1 1/2) Seminar on Public Transportation Issues

ADMN 523. (1 1/2) Seminar on Contemporary Topics in Administration

# ADMN 524. (11/2) Information Systems: Theory and Practice

Familiarization with data and information-processing concepts and procedures. The costs and benefits of data collection are considered within the framework of the informational needs of management for functions such as planning, controlling, and decision-making.

#### ADMN 525. (11/2) Labour Relations, Personnel and Collective Bargaining

Familiarization with the problems and procedures encountered in collective bargaining and the implementation of personnel policies in the public sector. Among the topics covered are: management's rights, bargainable issues, dispute resolution, arbitration, behaviour in negotiation and contract administration.

#### ADMN 526. (11/2) Simulation Applications in Organizational Systems

Practice in the design and use of simulations for the purpose of testing concepts and theories in organizational problems, planning and policy-making. Students will be exposed to various examples of simulation and gaming as training tools.

### ADMN 527. (11/2) Decision Analysis

Presentation of applications of the theory of decision-making under uncertainty within the framework of Bayesian inference and cardinal utility. Applications will include inspection sampling, equipment replacement and project cost estimation.

Prerequisite: Administration 500 or its equivalent.

### ADMN 528. (1 1/2) Production and Operations Management

The course explores operational methods suitable for scheduling operations in institutional and service oriented settings, and provides experience with the analytical approach to production and operations management, including the design of production systems (process planning, plant location, layout facilities, work measurement); operations, planning and control.

### ADMN 529. (11/2-3) Organizational Development and Training

An examination of the contemporary experience in the public sector with organizational development applications in public institutions.

Prerequisite: Administration 506 or its equivalent.

#### ADMN 590. (11/2-3) Directed Studies

With the approval of the School and of the other Departments or Institutions affected, students may select their remaining courses from offerings available at the University of Victoria or at cooperating institutions.

# SCHOOL OF SOCIAL WELFARE

Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), P.h.D. (Brandeis), Professor and Director of the School.

Guille Libresco, B.A. (Brooklyn Coll.), M.S.S. (N.Y. Univ.), Ph.D. (Ore.), Sessional Lecturer (second term, 1975-76).

# **BACHELOR OF SOCIAL WORK**

The School of Social Welfare offers a programme of studies leading to the degree of Bachelor of Social Work (B.S.W.). Admission to this programme requires completion of the first two years (30 units) of an undergraduate programme at the University of Victoria with an overall average of at least second class (a grade point average of 3.5) or better, or the equivalent at another university or a community college. Candidates for a B.S.W. degree must comply with the Minimum Degree Requirements for a Bachelor's degree outlined on page 12 of the University Calendar.

degree outlined on page 12 of the University Calendar.

The objective of the B.S.W. programme is to prepare general practitioners who can respond to troubled individuals and families in a social systems context. This objective calls for a blending of interpersonal and analytic skills and knowledge of individual behaviour and social conditions. The programme seeks to prepare graduates who can function on an inter-

disciplinary basis in the non-urban areas of B.C.

A one-year post-B.A. programme has been authorized by the University and will be offered in 1976-77 if sufficient resources are available.

# ADMISSION PROCEDURES

Students transferring from other post-secondary institutions must submit an application for admission to the University to the Director of Admission Services by April 30.

Returning students who are in or who have already completed second year at the University of Victoria must make an application for entry into

the B.S.W. programme to the Records Office by April 30.

Approximately 35 students will be admitted to the B.S.W. programme in 1976. The precise number will depend on the resources available to the School and the number of qualified applicants. Preference will be given to students who have gained experience in either health or social agencies on

a paid or volunteer basis. Selection of the group admitted to the School will be made on the basis of grades, a personal written submission and an interview. Students wishing an interview before April 30 should so indicate on the application form.

### PROGRAMME REQUIREMENTS

#### First Year

The following first year courses are recommended. Students should consult the University Calendar for information regarding prerequisites for senior-level courses.

Anthropology 100

Bacteriology 101

Biology 150

Economics 100

English 115, and 121 or 122

Mathematics 130, or 102 and 151

Philosophy 100

Political Science 100

Psychology 100

Sociology 100

#### Second Year

Social Work 200 is required for entry into the B.S.W. programme. Social Work 200 is open to any student who has completed first year satisfactorily but carries credit in the Faculty of Arts and Science only as a free elective (see page 25 of the Calendar: Courses Not Recognized in the Faculty of Arts and Science).

Students meeting all requirements for admission except Social Work 200 can apply for conditional acceptance and enrol in Social Work 200 in Summer Session.\*

In second year the following courses, or their equivalent, are strongly recommended:

Psychology 220

Sociology 200

Other appropriate second year courses are as follows:

Biochemistry 201

Child Care 200 (carries credit in the Faculty of Arts and Science only as a free elective).

Anthropology 200

Economics 200

Geography 201, 204 or 205

History 242

Statistics 253

Philosophy 202, 232 or 269

Political Science 201, 210, 220, 230, or 250

Sociology 209

# Third Year

In the third year students will take Social Work 300, 301, 302, 303, 304, (unless special permission is received from the Director to omit a course or courses from this group), and 3 units of electives chosen in consultation with the Director. Total units, 18 (including  $1\frac{1}{2}$  units from either Sociology 341 or Geography 346).

# FOURTH YEAR — FOR INFORMATION ONLY

The following courses are being planned for the fourth year of the programme:

# Policy and Administration

First term — basic concepts and principles of administration. Second term — social policy, social systems analysis and the organization of services.

# Social Work Field Practice

Two days a week of field practice plus a theory seminar.

#### Directed Studies

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

\*In 1976 Summer Session, Social Work 400 will be offered and will be accepted in lieu of Social Work 200.

#### **COURSES**

Third year courses, except Social Work 304, may be taken by students outside the School with the permission of the Director. Social Work 300, 301, 302 and 303 may be of particular interest to students in Child Care, Nursing, Law and Education. Students in other Faculties wishing to take these courses should consult the appropriate advising service.

# SOC W 200. (3) An Introduction to Social Welfare in Canada

Consideration of current social problems including crime, poverty, health care, aging; an examination of society's response to these problems; the role of social workers in delivering services and in the formulation of social policy.

Students may not receive credit for both Social Work 200 and Social Work 400. (3-0; 3-0)

# SOC W 300 (C C 300). (3) Law and Social Services

The objective is to provide students in Child Care and Social Welfare with an understanding of the Law as an expression of social policy and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts with special reference to laws affecting children; the organization of legal services; and the legal accountability and liabilities of social workers, child care workers and others in the social service field.

(2-0-2; 2-0-2)

#### SOC W 301. (3) Interpersonal Communication

This course has a number of interrelated objectives: to introduce students to the literature on interpersonal communication; to afford an

opportunity for a critical review of various approaches to interpersonal helping; to assist students in developing a personal commitment to, and philosophy of, the art of interpersonal helping; and to involve students in simulated practice experiences. (3-0; 1-3)

# 5OC W 302. (1 1/2) The Community in Canada

A review of experiences in the community control of services and of various approaches to community development.

Prerequisites: Sociology 341, or Geography 346.

January-April only. (3-0)

### SOC W 303. (3) Social Work Practice and Planned Change

The objective of this course is to introduce students to the generic approach to social work practice by using major concepts and theories concerned with the planning of change.

(3-0: 3-0)

# SOC W 304. (3) Social Work Field Practice

The School intends to develop a number of field teaching centres in various locations in the province. The third year field placement is planned as a four month summer experience between third and fourth years in which students will be assigned a wide range of responsibilities at the individual, group and community level. Relevant conceptual content will be considered in a weekly seminar.

# SOC W 390. (1 1/2 or 3) Directed Studies

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

# DIVISION OF CONTINUING EDUCATION

Director: Laurence E. Devlin, B.Ed. (U. of Vic.), M.A., Ph.D. (Chicago).
Associate Director: Glen M. Farrell, B.S.A. (Sask.), M.Sc., Ph.D. (Wisc.)
Programme Officer: A. Allan Beveridge, B.A. (Queen's), M.Sc. (Guelph).
Programme Officer: Faith B. Collins, B.Sc.N. (Mount St. Vincent), B.A., M.Ed. (Seattle).

The purpose of the Division is to provide learning opportunities for adults seeking the most current knowledge in a wide variety of subjects. Through the continuing education programme, the academic resources of the University are made directly available to citizens of Greater Victoria and nearby communities.

The non-degree programme of the Division consists of a broad range of courses offering potential intellectual growth and improved professional competence. In addition, the Division plans and administers degree credit courses at off-campus locations and publishes each spring a calendar of evening degree courses offered on campus.

The non-degree programme utilizes a variety of educational formats, such as courses, lecture series, workshops, conferences, residential seminars, and symposia. The curriculum is developed in co-operation with Departments from all Faculties of the University — Arts and Science, Education, Fine Arts and Law. Instructors are also appointed from the University's professional staff of the McPherson Library, Computing and Systems Services and the Counselling Centre.

The following partial list of non-degree courses offered in the academic year 1975-76 illustrates the variety of learning opportunities available to adults through the Division:

adults through the Division:

LANGUAGES: Chinese, French, German, Hebrew, Norwegian, Russian, Spanish and Swedish.

LIBERAL ARTS: Astronomy Today, Dante's Divine Comedy, Identification and Naming of Wild Plants, In Good King George's Glorious Days, The Living World, Modern French Novel, Plate Tectonics and the Continental Drift, Collection and Cultivation of Rhododendrons, Rock and Mineral Identification, Saint or Sinner: Chemistry in a Changing World.

CREATIVE ARTS: Film-maker's Workshop, Introduction to Creative Film-making, New Forms of Musical Experience: Experiment and Evolution in Musical Style of the 20th Century.

COMPUTING SCIENCE: Advanced PL/1, Applications Programming, Introduction to Computers, Introduction to PL/1.

BUSINESS AND MANAGEMENT: Business Administration in Canada, Business Law, Fundamentals of Accounting, Marketing.

CONTINUING PROFESSIONAL EDUCATION: Electrosurgery for the General Practitioner, Automatic Nervous System, "Confused" Patients: Reality, Enterostomal Therapy, What's New in Nursing, Muscular Skeletal Anatomy, Sensory Integration and Learning,  $E_1V_1(B)$ , Legal Responsibilities, Current Issues in Social Work Practice, Psychosocial Aspects of Aging, Selected Topics in Administration: Issues of Concern to Women in Social Work, Social Policy and Income Security, Social Welfare Policy, Working With Communities.

SPECIAL PROGRAMMES: Adult Individual Fitness Programme, Arms Control and Disarmament, Silver Threads Lecture Series, Dinner/Theatre Evening, Magic Screen, UVic Film Society.

### FRENCH LANGUAGE DIPLOMA PROGRAMME

In co-operation with the Department of French Language and Literature and the Department of Linguistics, the Division offers a French Language Diploma Programme. The programme consists of five integrated courses designed to develop a level of language competence functional throughout Canada. Students are placed at levels consistent with their initial ability, and they progress at their own individual rate. Expected completion time, on the average, is 3-4 years. The University awards a Diploma to successful candidates.

Special courses for groups can be arranged upon request, if academic

resources permit.

For a calendar listing Fall and Spring Programmes, Evening Credit Courses or for other information contact

Division of Continuing Education,

University of Victoria,

Telephone 477-6911, locals 802, 803, 804.

# SUMMER SESSION

Director: Geoffrey P. Mason, B.A., M.A. (Brit. Col.), Ph.D. (Wash. St.). Assistant to the Director: Mrs. Janet Senior.

The announcement of the courses to be offered in the Summer Programme will be issued in January and will be available on request from the Director of Summer Session.

The regulations governing the Summer Session are the same as those for Winter Session except as described in the Summer Programme Supplement to this Calendar.

#### INDIVIDUALLY SUPERVISED STUDIES MAY TO AUGUST 1977

Individually supervised studies may be undertaken during the periods May 2-June 30, July 4-August 17 or May 2-August 17. These studies may consist of Directed Studies courses (normally numbered 490) or regular courses taken as individually supervised studies courses.

Under no circumstances will courses be allowed to extend beyond the

terminal date.

The following conditions apply to all individually supervised studies courses:

- The student must have an academic standing acceptable to the Faculty or Department, Division or School in which the course is given.
- Approval in writing must be given by each of the following, in the order indicated:
  - (a) The supervising faculty member (or members).
  - (b) The Head or Chairman of the Department or Division, or the Director of the Programme.
  - (c) The Dean of the Faculty, who requires a course outline for Directed Studies courses.
  - (d) The Director of Summer Session.
- 3. Written approvals as indicated above, except for 2(d), and completed registration materials must be received by the Summer Session Office as follows:

Courses starting in May - March 31 Courses starting in July - April 30

#### **Procedures**

The student is required to arrange for a course as follows:

- Consult with the instructor for his written approval and if the course is a Directed Studies course, obtain an outline of the course.
- Obtain the approval in writing of each of the other officials designated above.
- Present his completed registration materials to the Summer Session Office by the date indicated.

N.B. It is the student's responsibility to make all the necessary arrangements personally. The University will not enter into correspondence in regard to arrangements for individually supervised courses.

### Other Regulations

Individually supervised studies courses are subject to the University regulations that govern course load, grading and credit, fees, and other regulations that apply — see the Summer Programme Supplement to this Calendar.

# **OFF-CAMPUS COURSES**

University of Victoria offers credit courses during the Winter Session at certain centres on Vancouver Island for the benefit of persons who are unable to attend courses at the University and who wish to undertake studies on a part-time basis. The term is the same as that for students on campus and classes are conducted for the same number of hours per week. The University reserves the right to change the starting times or cancel courses when enrolment is not sufficient.

# **CALENDAR REGULATIONS**

Students taking courses off campus are subject to all the academic rules and regulations that apply to students at the University. The courses offered are the same as those offered to students proceeding to a degree on campus. Selection of courses must be made in keeping with Calendar prescriptions for the degree programme involved. Students seeking academic advice re-

garding degree programmes should consult the appropriate academic advising centre. Enquiries should be directed to one of the following:

Advising Centre — Faculty of Arts and Science — R.323 MacLaurin Building.

Advising Centre — Faculty of Education — R.250 MacLaurin Building. The Dean's Office — Faculty of Fine Arts — R.192 MacLaurin Building.

#### CREDIT FOR HIGHER TEACHER CERTIFICATION

Applicants who hold teaching certificates should not assume that they possess the requirements for admission to the University. Applicants admitted to a degree programme at the University may improve their teacher certification by completion of appropriate courses as specified in the Calendar of the University. Teachers who do not wish to work towards a degree but toward higher teacher certification, or who are not admissible to a degree programme, must direct all enquiries concerning teacher certification to the British Columbia Department of Education, Victoria, which is solely responsible for teacher certification in this Province.

#### SESSION

Monday, September 13, 1976, to Thursday, April 28, 1977.

### **AUDITING**

Persons wishing to audit a course may do so but may not register until after students have registered for credit. (See page 11.)

### APPLICATION AND REGISTRATION PROCEDURES

Students who were registered in credit courses prior to September 1976 should apply for re-registration using the required APPLICATION FOR RE-REGISTRATION form which is obtainable from the Records Office.

Persons seeking admission to the University for the first time must obtain an APPLICATION FOR ADMISSION form from the Director of Admission Services. This form, fully completed and accompanied by all official transcripts of academic records, should be submitted to the Director of Admission Services.

Applicants whose registration is authorized will receive notification by mail and must attend registration-in-person procedures held in Nanaimo

on September 11, 1976.

Students will be registered in courses on a first-come, first-served basis and, while applications that are accompanied by all required documents may be accepted if presented in person at Nanaimo on September 11, students are urged to complete application procedures well in advance of registration-in-person procedures, otherwise their registration will be delayed until their applications are processed.

Registration for all courses to be taken during the Winter Session, including courses beginning in January, must be completed at the time of

registration in person in September.

# **FEES (INCLUDING AUDITORS)**

Regulations regarding payment of fees are contained on page 16 of the Calendar and are the same as those for other students in the Winter Session, with the exception that the full fee instalment must be paid at the time of registration by students enrolled in off-campus courses. The following is a brief summary of calendar fee regulations which apply to off-campus courses:

Tuition fees: \$30 per unit. Auditors: \$5 per unit for those 65 years of age or over; \$15 per unit for all other auditors.

Other fees when applicable are:

Graduation Class fee	
Late Payment Fee 10% of unpaid balance; minimum \$5.00, maximum	\$20.00

#### Payment of Fees:

- a. For courses that finish in the first term full fees must be paid at the time of registration.
- b. For courses that do not finish in the first term fees may be paid in full at the time of registration or in two instalments:
  - (i) First fee instalment one half of sessional tuition fees plus (if applicable) graduation class fee and late registration fee — payable at the time of registration.

(ii) Second fee instalment — one-half of sessional tuition fees — may be paid at time of registration or at any time during the first term. Second fee instalments not received in full by January 14, 1977 are subject to a late payment fee, additional to all other fees.

### WITHDRAWAL

Students who withdraw from a course should notify the Records Office immediately in writing. Otherwise, full sessional fees will be assessed and applications for re-registration may not be accepted until accounts are settled in full. Refunds will be made in accordance with regulations given on page 17 of the Calendar.

### LIST OF COURSES

A list of courses to be offered may be obtained from the Division of Continuing Education, local centres of adult education where University courses are offered, and from the Admissions Office or the Records Office.

# **AFFILIATE**

# VICTORIA CONSERVATORY OF MUSIC

On June 18, 1968, the Victoria Conservatory of Music became affiliated with the University of Victoria. The Conservatory began in 1964 as the Victoria School of Music.

Students in the Bachelor of Music programme and in the music teaching area in the Bachelor of Education programme receive their solo performance tuition from the faculty of the Conservatory.

A list of the Conservatory faculty is shown under the Department of Music. See page 133.

# PRE-PROFESSIONAL EDUCATION

The material which follows is only a guide to professional education at other universities, and students must not assume that completion of these courses will grant them automatic admission. Students who are seeking advice about professional education should consult the Arts and Science Advising Centre, University of Victoria.

Please note that course programmes for First Year students only are outlined, although it may be possible to complete one or more additinal years of study at the University of Victoria.

Students who plan to undertake professional studies at other Canadian or American universities are urged to correspond with the universities of their choice during their first year at the University of Victoria.

#### AGRICULTURE

Suggested courses:
Biology
Chemistry
English
Mathematics
Physics

# APPLIED SCIENCE

Suggested courses:
English
Mathematics
Chemistry
Physics
Arts elective

# ARCHITECTURE

Suggested courses: English Mathematics History in Art Electives

#### COMMERCE AND BUSINESS ADMINISTRATION

Students interested in Commerce and Business Administration are advised to consult the Head of the Department of Economics, University of Victoria.

Suggested course: First Year Arts and Science or its equivalent with standing in 15 units (including English and Mathematics).

#### DENTAL HYGIENE

Suggested courses: English

Chemistry Biology Psychology An elective

#### **FORESTRY**

Suggested courses:

Biology Chemistry English Mathematics **Physics** 

#### MEDICINE

Completion of at least three years of study in Arts and Science including English, Mathematics, Chemistry, Biology, Physics

#### REHABILITATION MEDICINE

Suggested courses: English Mathematics Chemistry Biology Arts elective or Physics

#### DENTISTRY

Completion of at least three years of study in Arts and Science including English, Mathematics, Chemistry, Biology, Physics.

#### **HOME ECONOMICS**

Suggested courses: English Chemistry Physics Mathematics Biology or a Social Science

#### **PHARMACY**

Suggested courses: Chemistry English Mathematics Physics or Biology A Non-Science elective

#### **PSYCHOLOGY**

Students wishing to enter a professional school of psychology are advised to complete the B.A. Honours or B.Sc. Honours programme in the Department of Psychology, University of Victoria.

### LABORATORY TECHNICIAN

Suggested courses: English Mathematics Biology Chemistry An elective

### VETERINARY MEDICINE

Completion of two years in Arts and Science including: English Physics Biology and Zoology, including Genetics Chemistry, including Organic Chemistry Mathematics Electives

# **AWARDS AND** FINANCIAL AID

#### **GENERAL REGULATIONS**

All enquiries concerning material in this section except University of Victoria graduate fellowships and scholarships should be directed to the Financial Aid Office, University of Victoria. Information regarding University of Victoria Graduate awards may be obtained from the Faculty of Graduate Studies, Building "L".

All awards adjudicated by the University of Victoria are administered

by the Senate Committee on Awards.

To be eligible for a scholarship offered by the University, a student must take a full year's programme (this shall be at least fifteen units) which must include the required courses for the year in which the student is registered. Where credit has already been obtained in a required course, however, another may be substituted with the permission of the Dean of the Faculty concerned except that grades of compulsory courses must be included in the required number of units for the year and degree in which the student is registered.

A student who has a failure in one of the required courses for the year will not be eligible for an award based on academic merit. Except where terms and conditions of an award specifically state otherwise, award winners must return to the University of Victoria in the next regular session and

must enrol in a full programme.

For general proficiency awards, the standing of students who are registered in more than 15 units of courses will be determined on the basis of the grades of the best 15 units of courses, except that grades of compulsory courses will be included in computing the overall standing.

The University reserves the right to limit the amount of money retained by a student and, if necessary, to reassign awards to other students by reversion. In cases of reassignment by reversion, the names of the original recipients will be included in the published list of awards.

Where applications are necessary, the deadline for submission of applica-

tion forms is April 30, unless otherwise stated.

Awards may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of award; withdrawal from the University; unsatisfactory conduct, attendance or progress; withdrawal of the award by the donor.

Except where the donor directs otherwise, the proceeds of scholarships and bursaries issued by or through the University will be applied against the total fees for the academic year. If the amount of the award or awards exceeds the unpaid total fees for the academic year, the excess balance will be paid to the student.

If for any reason the original recipient becomes ineligible to hold an award, the funds will be reassigned, by reversion, to other students. In such cases, the published list of award winners will show only the names

of the original recipients.

Other awards, such as medals or book prizes, if not presented directly by donors or their agents, will be forwarded to the winners upon receipt.

#### **DEFINITIONS**

- (a) An award is any scholarship, fellowship, bursary, medal or prize.
- (b) A scholarship or fellowship is a monetary award based on academic merit or excellence in the area to which the award pertains.
- (c) A bursary is a monetary award based on need and reasonable academic standing.
- (d) A medal is an award based on academic merit or excellence in the area to which the award pertains.
- (e) A prize is an award in the form of cash or of some tangible object such as a book, based on academic merit or excellence in the area to which the award pertains.
- NOTE: None of the above awards requires that the student discharge any duties for the University or any other agency. This applies to awards administered by the University of Victoria only.

#### LIST OF AWARDS

The sections of the Calendar which follow show awards grouped under certain headings:

Section 1: Entrance awards:

A. Administered by University of Victoria. (See this page.)

- B. Administered by The University of British Columbia. (See page 167.)
- C. Administered by the Association of Universities and Colleges of Canada. (See page 170.)
- D. Administered by other institutions and organizations. (See page 170.)
- Section 2: Government of British Columbia Awards. See page 173.
- Section 3: University bursaries requiring application. See page 174.
- Section 4: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 174.
- Section 5: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 180.
- Section 6: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See
- Section 7: Awards for graduate study. See page 184.
- Section 8: Loan funds. See page 186.

# SECTION 1

### **ENTRANCE AWARDS**

The following scholarships are open to students who have completed University Entrance and are proceeding to the University of Victoria directly from Grade XII.

#### A. ENTRANCE AWARDS ADMINISTERED BY UNIVERSITY OF VICTORIA

Application forms for the following awards may be obtained from the Financial Aid Office, University of Victoria, Victoria, B.C., and must be returned before June 30. Names of winners will be released early in September.

PRESIDENT'S ENTRANCE SCHOLARSHIPS - Five scholarships of \$500 each for British Columbia secondary school graduates who are entering the University of Victoria in September 1976. Awards will be based upon high standing in the matriculation record of students and the British Columbia Scholarship Examinations. Recipients will be selected by the Committee on Awards and awards will be announced after the release of the examination results in the summer. If funds permit, additional awards in smaller amounts may be allocated.

CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS -The C.U.P.E. will provide annual scholarships of \$200 each to five promising and deserving students who will register in the First Year at the University of Victoria. Students must have obtained first class or a good second class standing on their Senior Secondary statement of marks issued for graduation. These scholarships are open only to sons or daughters of members of the Canadian Union of Public Employees of the Greater Victoria area. Recipients will be selected by the Committee on Awards in consultation with officials of the Union.

ALDYEN HAMBER I.O.D.E. ENTRANCE SCHOLARSHIP—Two hundred and fifty dollars (\$250) awarded annually to a deserving woman student entering the first year at the University of Victoria. Applicants must write the British Columbia Scholarship examinations. Selection of the recipient will be made by the Senate Committee on Awards after consultation with the donor.

THE HARBORD INSURANCE LTD. SCHOLARSHIP - Five hundred dollars (\$500) awarded annually to the most promising scholar leaving School District No. 61, entering the Faculty of Fine Arts at the University of Victoria and intending to specialize in Music. Selection of the winner will be made by the Committee on Awards after consultation with the appropriate officials of School District No. 61 and the Department

LABATT BREWERIES OF BRITISH COLUMBIA LIMITED SCHOL-ARSHIP — A scholarship of five hundred dollars (\$500) is provided by Labatt Breweries of British Columbia Limited to be available for students who are resident in British Columbia and who are proceeding directly from Grade 12 to a full course of study at the University of Victoria. The winner will be selected by the Senate Committee on Awards on the basis of scholastic standing, character and participation Government scholarship examinations, conducted by the Department of in school and community affairs. Candidates must be eligible in all respects to compete for Government scholarships and must write the Education.

- \*SARA AND JEAN MACDONALD BURSARY FUND Provides annual bursaries for worthy and deserving women students entering the University of Victoria from secondary schools. Selection is to be made by the Committee on Awards on the basis of financial need and recommendations from secondary schools. At present, the fund provides four bursaries valued at \$300 each.
- PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY — A bursary of \$600 is offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this insurance company. It is open to students entering University from Grade XII. Applicants must apply on the University Scholarship Form. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.
- THE READ JONES CHRISTOFFERSEN LTD., CONSULTING ENGINEERS SCHOLARSHIP Two hundred dollars (\$200) awarded annually to a student entering the University of Victoria to study pre-engineering. Selection will be made by the Committee on Awards in consultation with the donor.
- THE VANCOUVER ISLAND REAL ESTATE BOARD BURSARY -A bursary of five hundred dollars (\$500) is provided by the Vancouver Island Real Estate Board to a student holding Canadian citizenship, going directly from grade 12 to the University of Victoria. Candidates must be graduates from senior secondary schools in the Board area which comprises school districts 65, 66, 68, 70, 71, 72, 84 and 85. The winner will be selected by the Senate Committee on Awards on the basis of financial need and recommendations from the school. Candidates are urged to write the Government Scholarship Examinations, but this regulation is not mandatory in order to be considered for the award.
- UNIVERSITY OF VICTORIA ALUMNI AWARD Contributions to the Alumni Annual Giving Campaign and other funds have made possible the institution of a \$500 annual Award by the Alumni Association of the University of Victoria. The Award is open to students entering either first or second year at the University who intend to complete an undergraduate degree at the University. There is no age limit for applicants and the competition is open to students who propose to carry a minimum of 6 units of credit during their first year at the University. However, preference will be given to candidates undertaking a full-time programme of studies. The Award may be renewed for a total of two years, providing that the candidate continues to meet Award criteria. The Selection will be based on the following criteria, assessed by the Alumni Award Committee:
  - a) academic achievement or the potential for academic achievement
  - b) financial need
  - c) potential for intellectual and social contribution to University life.

In assessing the above criteria, the Award Committee will be guided by the assumption that the University of Victoria has a special contribution to make to the personal and intellectual development of its students, and, therefore, that the qualities desired of successful candidates must be evaluated in the expectation of probable development while at the University. The Committee will be concerned with candidates who, in the absence of assistance, would not otherwise attend the University of Victoria.

- B. ENTRANCE AWARDS, ADMINISTERED BY THE SCHOLAR-SHIP AND BURSARY COMMITTEE, THE UNIVERSITY OF BRITISH COLUMBIA, 2075 WESTBROOK PLACE, VANCOU-VER, B.C. V6T 1W5
- (1) Entrance Scholarships which must be applied for by July 1 unless otherwise stated.
- BRITISH COLUMBIA FOREST PRODUCTS LIMITED ENTRANCE SCHOLARSHIPS — Ten scholarships of \$400 each are offered by British Columbia Forest Products Limited to legal dependents of employees who, by June 30 of the year in which the award is made, have or will have served with the Company for at least one year. They are open to students proceeding in the fall from Grade XII to a full course of studies at The University of British Columbia, University of Victoria, Notre Dame University of Nelson, or Simon Fraser University. Candidates for these scholarships must be eligible in all respects to compete for Government of B.C. Scholarships and must write the Scholarship Examinations conducted in January or June by the Department of Education, B.C. The scholarship will normally be awarded to the ten candidates obtaining highest standing. Those grades obtained in other subjects
- \* Administered by the University of Victoria Foundation.

- taken during the year may also be considered. No award will be made, however, to an applicant with an overall average of less than 70% Applicants for these scholarships must state the necessary details of family service with the Company. Postponement of attendance at the University of British Columbia, Simon Fraser University, Notre Dame University of Nelson or the University of Victoria may be granted to a scholarship winner, but only for certified medical reasons, and then only for a period of a year. Application for postponement must be made to The University of British Columbia at the time the award is made.
- THE FEDERATION OF TELEPHONE WORKERS OF BRITISH COLUMBIA, PLANT DIVISION, SCHOLARSHIP The Federation of Telephone Workers of British Columbia, Plant Division, offers two scholarships of \$500 each to sons and daughters of members (with at least twelve months continuous service) or of deceased members (with the same service). They are open in competition to students proceeding in the fall from Grade XII in secondary school to a full programme of studies at the University of British Columbia, Simon Fraser University, the University of Victoria, Notre Dame University or any other accredited regional college in B.C. To be eligible for consideration a candidate must have an overall average of at least 70% in the subjects of the grade in which he or she is registered. Candidates will be considered on the basis either of standing received by recommendation or in the January or June Departmental Scholarship Examinations. The winners will be selected by the University of British Columbia, in consultation with the Federation, from those who so qualify. In the final selection, a major factor will be the financial circumstances of applicants and their families. Applications must contain details of family service with the Federation and other pertinent information.
- THE FEDERATION OF TELEPHONE WORKERS OF BRITISH COLUMBIA, TRAFFIC DIVISION, SCHOLARSHIP—The Federation of Telephone Workers of British Columbia, Traffic Division, offers a scholarship of \$500 to sons and daughters of members (with at least traffic property of the state of the st twelve months continuous service) or of deceased members (with the same service). It is open in competition to students proceeding in the fall from Grade XII in secondary school to a full programme of studies at the University of British Columbia, Simon Fraser University, or the University of Victoria. To be eligible for consideration a candidate must have an overall average of at least 70% in the subjects of the grade in which he or she is registered. Candidates will be considered on the basis either of standing received by recommendation or in the January or June Departmental Scholarship Examinations. The winner will be selected by the University of British Columbia, in consultation with the Federation, from those who so qualify. In the final selection, a major factor will be the financial circumstances of applicants and their families. Applications must contain details of family service with the Federation and other pertinent information.
- THE WILLIAM L. HURFORD MEMORIAL SCHOLARSHIP—A scholarship of \$500, offered in memory of William L. Hurford by the British Columbia Maritime Employers' Association, is open to sons and daughters of members, in good standing, of the International Longshore-men's and Warehousemen's Union. The scholarship will be normally awarded to the candidate who obtains the highest standing in Grade XII Government Scholarship Examinations conducted in January or June by the Department of Education, Victoria, B.C. and who is proceeding in the fall to a full programme of studies at The University of British Columbia, University of Victoria, Simon Fraser University, or a regional college in B.C. The donors reserve the right to withhold the award if the academic standing of candidates is not sufficiently high or to re-award the scholarship if the winner receives other scholarships of substantial
- THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSE-MEN'S UNION ENTRANCE SCHOLARSHIPS — Four scholarships of \$500 each are offered to members, and sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They will normally be awarded to the candidates who obtain the highest standing in Grade XII Government Scholarship Examinations conducted in January or June by the Department of Education, Victoria, B.C., and who are proceeding in the fall to a full programme of studies at Simon Fraser University, University of British Columbia, Notre Dame University, the University of Victoria, or any accredited regional college in B.C. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high, or to re-award scholarships if winners receive other scholarships of substantial value.
- OCEAN CONSTRUCTION SUPPLIES LIMITED ENTRANCE SCHOLARSHIPS—Ocean Construction Supplies Limited annually offers scholarships to a total of \$1,000, open in competition to employees' sons and daughters who are proceeding in the fall from Grade XII to a full course of University studies. These scholarships of approximately equal value are provided for attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia

Institute of Technology, or, as may be recommended. Candidates for these scholarships must write the Government of British Columbia Scholarship Examinations conducted in January or June by the Department of Education, B.C. These scholarships will be awarded to the applicants who, in the opinion of the Committee are best qualified in terms of academic merit combined with interest and participation in school or community affairs.

- THE RETAIL CLERKS UNION, LOCAL 1518, SCHOLARSHIPS -The Retail Clerks Union, Local 1518, offers three scholarships of \$350 each to students beginning or continuing studies in a full academic programme of studies at the University of B.C., University of Victoria, or Simon Fraser University. The awards will normally be made to the applicants with the highest standing in the final examinations. Students entering from Grade XII must write the Scholarship Examinations conducted by the Department of Education. To be eligible a candidate must be a member, or the son, daughter, or legal ward of a member of the Union in good standing. Those who wish to be considered must give full details of their own or their parents membership in the Union. Two awards are available for students entering university and one for students continuing their university studies.
- RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 517, SCHOLARSHIP This scholarship of \$250 is offered to dependents or legal wards of members of Local 517. It open to competition to applicants who are proceeding from Grade XII to any accredited University or College in British Columbia, in a full programme leading to a degree or diploma. To be eligible for consideration an applicant must have a satisfactory academic standing (normally 65% or better average). In the selection of the winner the basic factor will be the academic standing of the applicant. Should there be a tie the financial need of the applicant and his or her family shall be the deciding factor. The winner will be selected in consultation with the Union.
- STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED ENTRANCE SCHOLARSHIPS—Standard Oil Company of British Columbia Limited offers four scholarships of \$750 each to students who are residents of British Columbia and are proceeding in the fall to studies in the First Year at the University of British Columbia, the University of Victoria, Simon Fraser University, a regional college in British Columbia, or approved Canadian University of recognized standing, in a full programme of courses leading to a degree. Candidates must be eligible in all respects to compete for Government of B.C. Scholarships and must write the Government of B.C. Scholarship Examinations for Secondary School Graduates conducted in January or June by the Department of Education, B.C. These scholarships will normally be awarded to applicants with outstanding averages in these examinations. Grades obtained in other subjects taken during the year may be considered. Selection of winners will also be based on the financial circumstances of applicants and their immediate families, the types and amounts of other awards received, and similar factors. No award will be made to a candidate with an overall average less than 75%. Postponement of an award is permitted only for certified medical reasons.
- STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED SPECIAL SCHOLARSHIP - Standard Oil Company of British Columbia Limited offers a scholarship worth \$3,000 to children or wards of employees or annuitants of the Standard Oil Company of British Columbia, or of deceased employees who died while in the employ of the Company or as annuitants of the Company, and who have or had not less than one year of service with the Company. It will be open in competition to students proceeding in the fall to studies in the first year at Simon Fraser University, University of British Columbia, the University of Victoria, a regional college in British Columbia or other approved Canadian university of recognized standing, in a full course leading to a degree. Candidates must be eligible in all respects to compete for Government of B.C. Scholarships and must write the Scholarship Examinations for Secondary School graduates conducted in January or June by the Department of Education, Victoria, B.C. The scholarship will normally be awarded to the eligible applicant obtaining highest standing in these examinations, but grades obtained in other subjects taken during the year may also be considered. Should this applicant win another award, however, the scholarship may be given, at the discretion of the Selection Committee, to the eligible candidate with next highest standing. No award will be made to a candidate with an overall average of less than 70%. In the case of a tie, the decision will rest with the Selection Committee. The winner of this award will receive \$750 during the first year of attendance at the University, and is eligible for renewals of \$750 a year for three further years. Each renewal is subject to maintenance of standing satisfactory to the University of British Columbia. The student must give essential details of family employment with the Company. Be careful not to confuse this scholarship with the Standard Oil Company of British Columbia Entrance Scholarship.
- TAHSIS COMPANY LTD. ENTRANCE SCHOLARSHIP Tahsis Company Ltd. offers annually a scholarship of \$500 to a first year

student to attend The University of British Columbia, the University of Victoria, or Simon Fraser University. This scholarship is open in competition to sons and daughters of employees of the Company proceeding in the fall from Grade XII to studies leading to a degree in any field. This scholarship is also open to students who intend to proceed to a regional college or The British Columbia Institute of Technology under the following qualifying conditions:

- 1. That the applicant must take two consecutive semesters of work at the regional college.
- That the applicant must take a full programme of work each semester in courses that will give him the equivalent of one full year of University credit at one of the universities in B.C.
- That the courses taken must be in a programme that will lead to a degree offered by one of the universities in B.C.

The application must state the name of the applicant's parents, one of whom must be currently employed by the Company, or have been employed for a minimum of one full year and then retired. Brief details of their service with the Company should also be supplied. All candidates must write the Government of B.C. Grade XII Scholarship Examinations conducted in January or June by the Department of Education, B.C.

The award will be made to the candidate obtaining the highest standing. In the event that the candidate wins another scholarship the University and the Company reserve the right to decide whether the Tahsis Company Ltd. Scholarship shall be paid to the winner or revert to the candidate with the next highest standing.

THE VANCOUVER SUN SCHOLARSHIPS FOR SUN CARRIERS -The Vancouver Sun offers annually two scholarships of \$500 each to students proceeding in the fall from Grade XII to the first year at Simon Fraser University, University of British Columbia, the University of Victoria, or Notre Dame University of Nelson. To be eligible applicants must have been carriers of the Vancouver Sun for at least two consecutive years. Winners of these scholarships who obtain and maintain first class standing in succeeding years of their undergraduate course or who rank in the top 10% of the Faculty and Year in which they are registered, will be eligible until graduation, up to a maximum of five payments in all, for extra grants of \$500 a year. The winning of this scholarship does not preclude the holder from enjoying the proceeds of other awards which may be offered him. He will not be also permitted, however, to hold The Vancouver Sun Special Scholarship for Carriers.

The scholarships will normally be awarded to the two applicants who rank highest in the Government of B.C. Scholarship Examinations conducted in January or June by the Department of Education, B.C., but grades obtained in other subjects taken during the year may also be considered. An applicant must be qualified in all respects to compete for the Government Scholarships, and will only be considered if he obtains an overall average of at least 75% in the Scholarship Examinations. The application must be accompanied by the service certificate of the Vancouver Sun.

THE VANCOUVER SUN SPECIAL SCHOLARSHIP FOR SUN CARRIERS — The Vancouver Sun offers annually a scholarship of \$500 to students proceeding in the fall from Grade XII to the first year at the University of British Columbia, the University of Victoria, Simon Fraser University, or Notre Dame University of Nelson in a full programme leading to a degree in any field. To be eligible an applicant must have been a carrier for the Vancouver Sun for at least two consecutive years, and must write the Scholarship Examinations for Secondary School graduates, conducted in January or June by the Department of Education, B.C. An applicant for this scholarship must be eligible in all respects to compete for Government of B.C. Scholarships. An applicant will be considered only if he obtains an overall average of at least 75% in the Scholarship Examinations. The scholarship will be awarded to the eligible applicant who, in the opinion of the Selection Committee, is the most outstanding in combining high scholastic attainment with achievement in one or more areas such as service to the school and community; writing, drama, fine arts; debating and public speaking; sports. A winner who, in successive years of his undergraduate course, obtains and maintains First Class standing (or ranks in the top 10% of the Year and Faculty in which he is registered) will be eligible for renewals of \$500 a year until graduation, not exceeding a total of five payments in all. Candidates will be judged on the basis of their examination grades, their personal letters, and letters of recommenda-tion from their references. The winner of this scholarship, while not also permitted to hold one of the Vancouver Sun Scholarships for Carriers, may accept other awards offered to him. The application must be accompanied by the service certificate of the Vancouver Sun.

### (2) Entrance bursaries which must be applied for by July 1 unless otherwise stated.

BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES — Bursaries to a total of \$8,000, each with a maximum value of \$300, are offered by British Columbia Forest Products Limited to qualified legal dependents of employees who, by June 30 of the year in which the award is made, have or will have served with the Company for at least one year and whose earnings are limited (see Company brochure for details). They are open to students beginning or continuing studies in the fall in a full undergraduate programme of studies at Simon Fraser University, the University of British Columbia, University of Victoria, or Notre Dame University of Nelson. Awards will be made at the discretion of The University of British Columbia to students selected on the basis of their academic standing and need for financial assistance. No award will normally be made, however, to a candidate who obtains an overall average of less than 60% or who is required to write supplementals to obtain clear standing in a full year's work. Winners of the Company's Entrance Scholarships will not be permitted to receive a Company Bursary in the same year. The application must contain the necessary details of family service with the Company.

THE GRAND LODGE MASONIC BURSARIES — The Grand Lodge of Antient Free and Accepted Masons of British Columbia annually offers bursaries in the range of \$200 to \$500 each with preference to the sons, daughters, and legal wards of active members of Masonic Lodges in British Columbia or of deceased members who, at the time of death, were active members of these Lodges. The purpose of these bursaries is to give assistance to students who, without financial aid, would find it impossible or difficult to continue their education at the post-secondary level. Selection of winners will be made by the University of British Columbia from applicants with satisfactory academic standing who are beginning or continuing undergraduate studies at any British Columbia University, the B.C. Institute of Technology, or a British Columbia regional college, leading to a degree or certification in any field. First preference will be given to applicants entering the university or college from Grade XII, and then to undergraduates in the second year of studies. The application must be accompanied by a letter from the Secretary of the Lodge indicating the applicant's association with the Lodge. Since a special committee considers applications for these bursaries, those who also wish to apply for other bursaries should submit a separate application for them. Each application must be accompanied by a transcript of the student's academic record at the academic institution most recently attended. If the Grade XII record is not immediately available it must be forwarded at the first opportunity.

THE HOSPITAL EMPLOYEES' UNION (PROVINCIAL EXECUTIVE BURSARIES—Two bursaries of \$250 each are offered by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full programme at the University of British Columbia, University of Victoria, Notre Dame University of Nelson, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in Technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. The bursaries will be awarded to the two candidates who, in the opinion of the University (in consultation with the Union), are best qualified in terms of financial need.

THE HOSPITAL EMPLOYEES' UNION (VANCOUVER GENERAL UNIT) BURSARIES—Two bursaries of \$350 each are offered annually by the Vancouver General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full programme at the University of British Columbia, University of Victoria, Notre Dame University of Nelson, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a Diploma in Technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. The bursaries will be awarded to the two candidates who, in the opinion of the University (in consultation with the Union), are best qualified in terms of financial need.

THE HOSPITAL EMPLOYEES' UNION (VICTORIA GENERAL UNIT) BURSARY—A bursary of \$250 is offered by the Victoria General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full programme at the University of British Columbia, University of Victoria, Notre Dame University of Nelson, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a Diploma in Technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in

the form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union), is best qualified in terms of financial need.

THE NETHERLANDS' ASSOCIATION BURSARY FUND — Bursaries to the total of \$750 are provided by the Netherlands' Association for children of full-time members of the Association of Dutch descent. Applicants must be beginning or continuing full-time undergraduate studies at the University of British Columbia, Simon Fraser University, or the University of Victoria. Awards will be made on the basis of academic standing and need for financial assistance, with preference to students who are not able to commute. Selection of winners will be made by the University of British Columbia in consultation with the Executive of the Association.

RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 470 BURSARY — One bursary of \$250 is offered by the Retail, Wholesale and Department Store Union, Local 470 to active members, or sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade XII to begin studies at the University of British Columbia, the University of Victoria, or Simon Fraser University, in a full programme leading to a degree in any field. To be eligible for consideration a candidate must have a satisfactory academic standing (normally an overall average of at least 65% in Grade XII). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

THE RETAIL WHOLESALE & DEPARTMENT STORE UNION LOCAL 580 BURSARIES — Two bursaries of \$250 each are offered by the Retail Wholesale & Department Store Union Local 580 to active members, or sons, daughters, and legal wards of active members of the Union in good standing. They are open in competition to applicants who are proceeding from Grade XII to studies at the University of British Columbia, the University of Victoria, Notre Dame University of Nelson, or Simon Fraser University in a full programme leading to a degree in any field. To be eligible for consideration a candidate must have satisfactory standing (normally an overall average of at least 65% in Grade XII). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winners will be selected in consultation with the union.

THE ROYAL ARCH BURSARIES — Four or more bursaries, in the amount of \$300 to \$500 each, have been established by the Royal Arch Masonic Order to give assistance to sons and daughters of members of Chapters in British Columbia or Yukon Territory in good standing, or of deceased members, who without assistance would be unable to continue through university. They will be awarded annually, on the basis of scholastic standing and need, to eligible students proceeding directly in the fall from Grade XII to a full programme of studies at the University of British Columbia, Simon Fraser University, University of Victoria, Notre Dame University of Nelson or any recognized regional college or the B.C. Institute of Technology. Candidates for these bursaries must write the Government Scholarship Examinations conducted in January or June by the Department of Education, B.C. This application form must clearly indicate (i) the applicant's relationship to a member of the Royal Arch Masonic Chapter, the name of the member, and the name of the Royal Arch Chapter in British Columbia or Yukon with which he or she was connected; and (ii) the applicant's financial circumstances and those of his or her immediate family, including the net taxable income of parents for the past year. A letter from the Secretary of the Royal Arch Chapter confirming the details in (i) should be included. Candidates will be considered on the basis of the Scholarship Examinations and the grades obtained in the other courses taken during the year, and on their financial circumstances. If, in the opinion of the University, no applicant is suitably qualified, the award will be withheld.

THE STRY CREDIT UNION BURSARY — A bursary of \$400 is offered by Stry Credit Union to students who are members of the Stry Credit Union for six months prior to July 1 of the year of application, or who are the sons, daughters, or legal dependents of members of at least one year's standing. It is open in competition to students proceeding from Grade XII to attendance at the University of British Columbia, the University of Victoria, or Simon Fraser University in a full course leading to a degree. The winner will receive \$300 during the first year of studies and, subject to satisfactory standing, \$100 during the second year. The award will be made on the basis of financial need and academic standing. If no suitable candidates apply in any year, the award will not be made in that year, but will accrue for the purpose of making additional awards in a future year, when more than one suitable candidate has applied. The bursary application form must be accompanied by a letter from the General Manager of Stry Credit Union, certifying that the applicant and his or her family meet the membership qualifications.

WHITE SPOT LIMITED BURSARY — One bursary, having a total value of \$1,000, is provided by White Spot Limited and its subsidiary companies for their employees, and sons and daughters of their employees who have served with the firm for at least two years. The bursary is paid in annual amounts of \$250 each and is open in competition to eligible students proceeding from Grade XII of secondary school to a full programme of studies at the University of British Columbia, the University of Victoria, or Simon Fraser University. For purposes of qualification, "employees" shall include students having part-time employment with the Company while attending secondary school, and who are still employed. The decision as to qualification by employment shall rest with the Company. In all other matters, winners will be selected by the Awards Committee of the University of British Columbia on the basis of academic standing and need for financial assistance. To be eligible, a candidate must have clear standing in the year's work most recently taken with an overall average of at least 65%. Winners will be considered for renewals of the bursary for their second, third and fourth years of University attendance (up to graduation). Renewals each year, however, are not automatic and will be made only to those who file a new application, pass in all subjects with a minimum overall average of 65%, need financial assistance, and who still qualify as employees of, or dependents of employees. at White Spot.

THE WOMEN'S AUXILIARY TO THE CANADIAN PARAPLEGIC ASSOCIATION BURSARIES — Three bursaries of \$300 each are offered by the Women's Auxiliary to the Canadian Paraplegic Association, B.C. Division to paraplegic students or sons and daughters of paraplegics. These bursaries are available to students who are beginning or continuing studies in one of the universities in British Columbia. They will be awarded by the University Awards Committee in consultation with the donors. To be eligible, an applicant must have satisfactory academic standing and need financial assistance.

# C. ENTRANCE AWARDS ADMINISTERED BY THE ASSOCIA-TION OF UNIVERSITIES AND COLLEGES OF CANADA

A.U.C.C. AWARDS — A number of entrance awards are administered by the Association of Universities and Colleges of Canada. Students are eligible to apply for the following awards by virtue of their parents' employment with the relevant donor companies. All awards are tenable for any recognized full-time degree course at any Canadian university or college which is a member of the Association of Universities and Colleges of Canada. Candidates must be prepared to enter university in the year of competition. The closing date for receipt of completed applications is June 1. Candidates must have obtained at least an average of 70% in each of the last two years of secondary school and must send these results to the A.U.C.C. as soon as they are available. The awards are as

Name	Value of Scholarship	Number Available
Gulf Oil Canada Limited — Scholarships	\$1,500	15
— Bursaries	500	20
Canada Cement Lafarge Ltd.	1,000	6
Canadian Johns-Manville Co., Limited	1,000	3
Continental Can Company of Canada Limited	1,000	2
IBM Canada Ltd.	1,000	6
Kraftco Undergraduate Scholarship Plan	1,000	3
The Life Underwriters Association of Canada Educational Foundation	1,000	6
The Motorola Memorial Scholarship	1,000	1
The Nathan Cummings-Consolidated Foods Scholarship	1,000	1
Nu-West Development Corporation Limited	1,000	2
Teleglobe Canada	1,000	1
Bell Canada Scholarship Plan	750	7
Canadian Reynolds Metals Company Limited	750	6
Consolidated-Bathurst Limited (Dominion Glass)	750	14

Name	Value of Scholarship	Number Available
Dominion Bridge Company, Limited	750	3
Gulf & Western Industries Inc. Scholarship Programme	750	2
James Richardson Scholarship Plan		
— Category "A"	750	5
— Category "B"	350	3
Lever Brothers Limited	750	3
Metropolitan Life Merit Scholarships	750	5
Quebec Cartier Mining Company	750	4
State Farm Canadian Centennial Scholarship	750	2
Warner-Lambert Canada Limited	750	5
Weyerhauser Canadian Scholarships	750	4
Canadian Pittsburgh Industries Limited	700	2
Celanese Canada Limited Undergraduate Scholarships	700	8
The Continental Corporation Foundation	700	3
Iron Ore Company of Canada	700	2
Amoco Canada Petroleum Company Ltd.	650	4
CN Centennial Scholarship Plan	600	8
Harry C. Bates Merit Scholarships — First-place	600	
— Second-plac	e 400	
Mobil Oil Scholarship Plan	550	4
Department of Transport	500	10
Gilbey Canada Limited Centennial Scholarship	500	3
Great American Scholarship Programme	500	1
Great Canadian Oil Sands Limited	500	3
Sun Oil Centennial Scholarship Plan	500	4
Texaco Canada Merit Scholarship Programme	Tuition fees	20
Texaco Exploration Merit Scholarship Programme	Tuition fees	5
The following programmes only require that the university or regional college in order to qualify	student be add	nitted to a

T university or regional college in order to qualify for the award.

Consumers Glass Company Limited	— University	1,000
	— College	300
Interprovincial Pipe Line Limited	— University	700
	- College	350

Candidates for the above-named awards should write directly to Mrs. Thérèse Pilon, Awards Officer, National Programmes Division, A.U.C.C., 151 Slater Street, Ottawa, Ontario K1P 5N1.

#### D. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITU-TIONS AND ORGANIZATIONS

THE W. A. C. BENNETT SCHOLARSHIPS - Five hundred dollars (\$500) given annually to one or more students who complete High School Graduation (University Programme) or Secondary School Graduation (Academic or Technical Programme) standing in June, who write the Department of Education examinations and qualify as prescribed under the regulations for the Government of British Columbia Scholarships. These candidates must submit formal application to the Awards Committee, W. A. C. Bennett Scholarship Trust Fund, Room 15, 246 East Broadway, Vancouver 10, B.C. by June 10 of each year. The application must be submitted by the candidate through the principal of the student's secondary school and must be supported by recommendation from the principal or other responsible person indicating that the student has displayed excellent qualities of leadership, citizenship, character and integrity, and that the applicant has need of financial assistance to permit him to undertake studies in higher education.

Applicants who qualify thus far will then be selected for award primarily on the basis of academic rank as shown by the academic average obtained in June, in keeping with the Government of British Columbia Scholarship regulations. Should a winner later withdraw his application the award would revert to the next eligible applicant in academic rank. The award is tenable for the next full year's study in higher education within the Province in the universities (University of British Columbia, Victoria, Simon Fraser and Notre Dame), in the B.C. Institute of Technology, and in District or Regional Colleges established under the Public Schools

Act. Awards may not be deferred from one year to another except in special cases in which the Awards Committee is satisfied the student is unable to continue further study because of certified medical reasons.

THE BOBBY BAUER MEMORIAL AWARD - The Bobby Bauer Memorial Foundation makes one or more awards annually to students demonstrating outstanding proficiency in hockey who qualify for admission to a full-time undergraduate course at a Canadian university.

Application should be made prior to August 31 on forms provided by the Foundation. A letter of reference from a person actively involved in hockey must accompany each application.

Inquiries and application should be sent directly to: Bobby Bauer Memorial Foundation, 60 Victoria Street North. Kitchener, Ontario.

- THE B.C. ASSOCIATION OF TEACHERS OF CLASSICS SCHOLAR-SHIP An annual award of \$100 will be given by the President of the University of Victoria to the leading student in British Columbia Latin 12 who registers at the University of Victoria for a first year course in Latin. An additional \$50 will be given by the B.C. Association of Teachers of Classics. Application to compete should be made through the B.C.A.T.C. Scholarship Committee on forms available from: Mr. E. J. Costain, Chairman, B.C.A.T.C. Scholarship Committee, 1320 Queensbury Road, Victoria, B.C.
- THE B.C. INDIAN ARTS SOCIETY MEMORIAL BURSARY Two Bursaries of \$150 each will be awarded annually by the B.C. Indian Arts Society in memory of those Indian Canadians who gave their lives in either World War. Native Indians or non-status Indians who apply, must be from the Province of British Columbia and must be planning to enter one of the established Universities or Colleges in British Columbia, or some recognized Technical School or other training centre. The award will be made by the Executive Committee of the B.C. Indian Arts Society. If no application is received from a student entering the first year of University, then the bursary may be awarded to a student enrolled in any of the senior years. Applications must be in the hands of the Secretary by August 15th. Letters of application should be directed to: The Honorary Secretary, B.C. Indian Arts Society, c/o The Provincial Museum, Victoria, B.C.
- CAL CALLAHAN MEMORIAL BURSARY The Pine Line Contractors Association of Canada offers a bursary, or bursaries, to the total of \$1,000 per annum, to be awarded annually, to sons, daughters or legal wards of persons who derive their principal income from the Pipeline Industry and whose employers are members of the Association.

The purpose of these bursaries is to give financial assistance to students who are beginning undergraduate studies in a full programme leading to a degree or certificate in any field, at a recognized University or College in Canada. Selection will be made by the Executive Committee of the Association from applicants, based upon scholastic record and financial need, provided that they otherwise qualify.

Applications may be obtained from the Association's Executive Office, Suite 400, 698 Seymour Street, Vancouver, British Columbia V6B 3K7 and must be returned by not later than September 30, accompanied by a receipt or other proof of enrolment.

CARLING O'KEEFE BURSARIES — There are 24 of these bursaries worth five hundred dollars each. These will be available on a basis of two to each province and the Yukon and Northwest Territories. This award programme has been established by Carling O'Keefe Breweries with the co-operation of the Canadian Labour Congress, to assist the children of trade union members in their pursuit of knowledge at the post-secondary level.

The bursaries are being offered to the sons and daughters of members who are in good standing in any union affiliated to or chartered by the Canadian Labour Congress. The awards are open only to Canadian

The student must be graduating from a secondary school and intending to go on to higher education in an approved institution, i.e., a university, technological institute, community college or CEGEP, teachers' college, nursing school, etc. These are entrance bursaries; they are not renewable for those entering their second year of studies. The successful applicant will be required to submit proof of academic standing as well as registration at one of the institutions indicated above.

Official application forms may be obtained from Carling O'Keefe Breweries, 79 St. Claire Avenue East, Toronto, Ontario M4T 1M6. The application form will, among other things, require a complete outline of the candidate's record in school, an essay on a subject relevant to the labour movement, and a recommendation from teacher, principal or other person in the community.

The selection of successful applicants will be made by a committee appointed by the Canadian Labour Congress. In the case of a tie, the applicant's relevant need will be investigated. In the case of a tie where need is equal, the award may be equally divided.

Application forms may be requested at any time. Completed application forms must be postmarked no later than March 15, 1977. Awards will be made in time for the commencement of semesters in the fall of 1977.

COMINCO HIGHER EDUCATION AWARDS - Cominco Ltd. offers awards each year to the sons, daughters, or wards of a person who is regularly employed by Cominco, or of a widow whose husband died while regularly employed by Cominco or of a Cominco pensioner or his widow to encourage students of good scholastic accomplishment to continue their education at an institution of higher learning beyond high school or senior secondary school. Cominco shall offer each year two classifications of awards to children of employees who are students enrolled in a high school or senior secondary school leaving course, preparatory to attendance at an institution of higher education. Class I awards, in the amount of \$500 each, shall be awarded to all students who make application and who have obtained an 86% or better standing, or corresponding letter-grade, in their high school leaving course. Class II awards, in the amount of \$350 each, shall be awarded to all students who make application and who have obtained an average in the 73% to 86% range, or corresponding letter-grade, in their high school leaving course. Applicants for these awards must be planning to attend an accredited Canadian university or college to pursue any course of study which will lead to a recognized degree, or must be planning to attend a recognized junior or regional college, or must be planning to enroll at a recognized provincial institute of technology. In the case of the latter institutions, these must be accredited by or under the supervision of provincial departments of educa-tion and where the course of study would lead to a recognized diploma or certificate. Courses of study must be of at least two years duration and will not be applicable when a student would be in receipt of remuneration while also undertaking study. Complete details regarding eligibility as well as application forms may be obtained from: The Secretary, Scholarship and Education Awards Committee, Cominco Ltd., Trail, B.C. The application must be returned no later than September 15.

NANCY GREENE SCHOLARSHIPS - Twenty scholarships, each for seven hundred fifty dollars (\$750), will be awarded in 1976 to those British Columbia students who apply and who best combine the qualifcations set out below. Any student currently registered in a senior secondary school (including independent and private schools) in British Columbia who plans to pursue an educational programme at any designated post-secondary educational institution in the Province of British Columbia is eligible to apply. Applicants must show evidence of good school and community participation and citizenship, leadership and character, scholastic achievement (a minimum average of C+ is mandatory in order for application to be considered) and athletic ability and performance.

Applicants are requested to complete the Nancy Greene Scholarship form and submit it along with a personal letter of application to the Secretary, Nancy Greene Scholarships at the address indicated below. The letter of application must specifically outline scholastic and athletic achievements in grades XI and XII, educational goals, and participation in school and community programmes and affairs, and should be written on 8½ by 11-inch paper. The applicant must request his or her school Principal to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships. The principal is requested to attach a statement of grades or marks and a statement certifying athletic and other participation. The applicant must request one other prominent individual in the community to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Department of Education. Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

IMPERIAL OIL HIGHER EDUCATION AWARDS — Imperial Oil Limited offers annually free tuition and other compulsory fees to the children of employees and annuitants who proceed to higher education courses. Initial awards, or renewal of awards, are restricted to students under twenty-five years of age on the date of registration for any under-

To qualify, a student must attain an average mark of 70% or higher in the appropriate secondary school examinations in the subjects required for admittance to the approved institution, or must have attained an average of 70% or more in a college year upon which application is

Courses may be taken at any Canadian university or other approved institution of higher learning, and awards are tenable for a maximum of four academic years, or the equivalent, at the undergraduate or bachelor degree level. The four levels of academic years are measured from the first year of entering a post-secondary institution.

Further information and application forms may be obtained from The Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Avenue West, Toronto, Ontario M5K 1K3.

- THE I.W.A. LOCAL 1-80, BURSARY The International Woodworkers of America Local 1-80 offers a bursary in the amount of \$400 in open competition to all I.W.A. Local 1-80 members or a wife, son, or daughter of an I.W.A. Local 1-80 member, or to a person who is wholly supported by a member in good standing of Local 1-80. For the purpose of eligibility in applying for a bursary, the wife, son, or daughter of a deceased I.W.A. Local 1-80 member in good standing at the time of decease, or a member who is retired and was a member in good standing of Local 1-80 at the time of retirement, shall also be eligible. In making the award, the bursary committee will be guided by the following: the average marks obtained by the Grade XII student during the school term; indication of need; all applicants must be in the university programme proceeding to any degree-granting university, the B.C. Institute of Technology, or other accredited vocational or technical school to complete a course leading to establishing a career. All those desiring to compete must notify the Financial Secretary of I.W.A. Local 1-80, 351 Brae Road, Duncan, B.C. by a letter not later than June 21. The I.W.A. Local 1-80 reserves the right to withhold the bursary if no candidate makes sufficiently high standing.
- MacMILLAN BLOEDEL LIMITED COMMUNITY SCHOLARSHIPS — Eleven scholarships of \$500 each, ten in British Columbia and one in Saskatchewan, are offered by MacMillan Bloedel Limited. The British Columbia awards are available, one in each of School Districts 65 (Duncan, Cowichan), 68 (Nanaimo), 69 (Qualicum), 48 (Howe Sound), 85 (Vancouver Island North), 50 (Queen Charlotte), and two each in School District 47 (Powell River) and 70 (Alberni), of which one is allocated to Tofino-Ucluelet. The B.C. scholarships are open to students graduating from Secondary School and proceeding to studies at recognized institutes of higher learning. Awards will be made on the basis of academic ability and potential leadership, as indicated by grade achievements in Grades XI and XII and participation in school activities. Further information may be obtained from the Principal of the School.
- MacMILLAN BLOEDEL LIMITED SPECIAL SCHOLARSHIPS FOR DEPENDENTS OF EMPLOYEES — Twelve scholarships of \$500 each, offered by MacMillan Bloedel Limited, are available annually to sons and daughters (or legal dependents) of employees of the Company serving in any MacMillan Bloedel Limited Division in North America. In addition to the \$500 scholarship award, special grants to equalize education opportunity may be made to students whose normal residence is remote from the university of their choice. No specific application is required for these grants. Because the majority of employees work in British Columbia, it is expected that most will be awarded in B.C. However, the diversity of the Company's operations will make it possible for awards to be made in other Provinces and in the United States. These scholarships are open to students graduating from secondary school and proceeding to studies at recognized institutes of higher learning. Awards will be made on the basis of academic ability and potential leadership as indicated by grade achievements in Grades XI and XII and participation in school activities. Application forms which must be submitted by May 31 each year, may be obtained from the Manager or Personnel Supervisor at each operating division, or from the Secretary, Scholarship Committee, MacMillan Bloedel Limited, 1075 West Georgia St., Vancouver 5, B.C.
- ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/ SCHOLARSHIPS The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled, or other veterans, but applications from other worthy students are also considered. The deadline date for applications is May 31. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2.
- TRANS MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS - Up to five Higher Education Awards will be offered annually by the Trans-Mountain Oil Pipe Line Company to sons, daughters and legal wards of regular employees and annuitants, deceased employees, and deceased annuitants. To be eligible a student must attain a minimum standing of 70% in the appropriate secondary examinations in the

- subjects required for admittance to approved institutions. Each award is tenable for a maximum of four academic years. Selection of winners will be made by the University of British Columbia from applicants who are entering a full programme of studies at the University of Victoria, the University of British Columbia, Simon Fraser University, or the British Columbia Institute of Technology. The value of award payments shall equal the tuition and other compulsory fees for the academic year. No portion of an eligible fee which is paid by a government shall be included in the amount paid as awards by the company. Further information and application forms may be obtained from Division Offices or the Personnel Dept. and forwarded to: The Trans Mountain Higher Education Awards Committee, c/o The Royal Trust Company, P.O. Box 2031, Vancouver, B.C. V6B 3R7. Applications must be submitted by August 31.
- THE UNIVERSITY OF VICTORIA SCIENCE FAIR AWARD The President of the University will award \$50 to the winner of the Senior Division of the Greater Victoria Regional Science Fair. The award is tenable only when and if the winner registers in a full programme of studies at the University of Victoria.
- VICTORIA MECHANICAL TRADE PROMOTION FUND SCHOLAR-SHIP - Provides a scholarship of three hundred dollars (\$300) each year, based on academic standing only with no reference to financial status or income. The award is open to students entering first year at the University of Victoria. Applicants must be sons, daughters or legal dependents of members of the United Association of Plumbers and Steamfitters, Local 324, who are employed by firms who are contributors to the Victoria Mechanical Trade Promotion Funds as provided in the Collective Agreement. Applicants may also be sons, daughters, or legal dependents of employers who employ members of the United Association of Plumbers and Steamfitters, Local 324 and who are contributors to the Victoria Mechanical Trade Promotion Fund. Further information may be obtained from Mr. E. M. McCaffery, Secretary Manager, B.C. Branch, Canadian Plumbing and Mechanical Contractors Association, 1128 West Georgia Street, Vancouver, B.C. V6E 3H9. Applications must be submitted by June 30.
- VICTORIA WOMEN'S CANADIAN CLUB SCHOLARSHIPS (1) One hundred and fifty dollars (\$150) awarded to the female student attending a public high school in Greater Victoria School District (No. 61) who makes the highest standing in the B.C. Government Scholarship Examinations, and registering for a full first year course in the University of Victoria or the University of British Columbia, the following September. (2) One hundred and fifty dollars (\$150) awarded to the male student in Greater Victoria School District making the highest standing in the same examinations and under the same conditions. Should the student, in either case, be awarded a scholarship from any other source, the Club Scholarship shall then revert to the student having the next highest standing.
- THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOL-ARSHIP — Two scholarships of \$250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendents, male or female, of a member of the Royal Westminster Regiment Association, of a member of the Royal Westminster Regiment CA(M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e. the 47th, 104th or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants may be in members of the Royal Westminster Regiment. The applicants may be in their final year of secondary school or any year of post secondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee, The Royal Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for applications is July 31.
- THE HON. W. C. WOODWARD UNIVERSITY MEMORIAL SCHOL-ARSHIPS These scholarships, each of \$600 per year, and renewable annually in the same amount at the beginning of each undergraduate year (up to a maximum of five payments in all), are offered in competition to sons, daughters, and legal dependants of regular full-time staff, of retired staff (retired on Store pension), and of deceased staff (who died while a Woodward's regular full-time staff. while a Woodward's regular full-time staff member). Three of these scholarships are available for attendance at the University of Alberta, University of Calgary, or the University of Lethbridge, and four are available for attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, or Notre Dame University of Nelson. They are open to applicants, beginning University attendance for the first time, and entering from Grade XII or XIII of secondary school (or any other source provided they are qualified for admission). Alberta candidates must write the Provincial examinations and British Columbia candidates must write the Government scholarship Examina-

tions conducted by the Provincial Department of Education. Awards will be made on the basis of (a) academic standing, (b) activity and interest in youth programmes, organizations and athletics within school and community, and (c) personal qualities, character and demonstration, during attendance at school, of citizenship, leadership, and service. Annual renewals are subject to maintenance of satisfactory academic standing, progress, and conduct. Application forms are available from the Personnel Offices of all Woodward's Stores from February 1st onwards and must be completed and returned to Woodward's by July 15th. Applicants must include the official transcript of their Secondary School record issued by the Department of Education of the Province. If the transcript is not available by July 15th., it must be forwarded by the student at the earliest possible date after July 15th., directly to the Administrator of Students Awards Office, University of Alberta, Edmonton, by the Alberta applicants, or to the Chairman, Joint Faculty Committee on Prizes, Scholarships and Bursaries, University of British Columbia, Vancouver 8, by the B.C. applicants.

# SECTION 2

# **GOVERNMENT OF BRITISH COLUMBIA AWARDS**

- PROVINCE OF BRITISH COLUMBIA GRANTS (For eligible undergraduate students) — The Government of the Province of British Columbia annually provides funds to assist students who are residents of this Province to commence or to continue an acceptable full-time programme of post-secondary studies at designated post-secondary educational
  - (a) within the Province of British Columbia;
  - (b) in other provinces of Canada when:
    - (i) an acceptable course of professional study in a particular programme is not provided within the Province of British Columbia, or
    - (ii) when admission to an acceptable course of professional study in a British Columbia university is rejected only because registration in that particular Faculty is filled;
  - (c) in exceptional circumstances, in other countries when an acceptable course of study in a preferred professional programme is not available at any designated institutions in Canada.

In cases provided for under (b) and (c) above the eligibility of the student and the acceptability of the programme will be decided by the British Columbia Student Aid Committee which may require the applicant to declare that he will return to the Province of British Columbia to practice the profession for which he qualifies.

The Provincial Grant Plan is administered in conjunction with the Canada Student Loans Plan, its purpose being to enable qualified needy students to reduce the amount of indebtedness they must incur to continue their post-secondary education. As the Provincial Grants are free grants of money from public funds students, and the parents of students defined under the Plan as financially dependent, must accept the principle that they are primarily responsible for provision of the funds required for the expenses of post-secondary education. The Provincial Grant Plan and the Canada Student Loans Plan make available means to supplement funds which should normally be available from the student/family resources.

The British Columbia Provincial Grant is available to only those students who are proceeding to a diploma or a first degree at the undergraduate or equivalent level of a post-secondary programme of study. A Provincial Grant will not be granted to students in Post-Graduate Studies, nor to those registered as "qualifying" or "unclassified".

The amount granted to an applicant for assistance depends upon the total amount of his financial need as determined under the Regulations of the Canada Student Loans Plan, and as recommended to the British Columbia Student Aid Committee.

To qualify for a grant (money that does not have to be repaid) a student must:

- (1) comply with the criteria of the Canada Student Loans Plan, as administered by the Provincial Authority of British Columbia;
- submit in accordance with the instructions stated on the form a fully completed: APPLICATION FOR FINANCIAL ASSIS-TANCE;
- (3) have been resident in this Province for not less than twelve consecutive months prior to the first day of the month in which he commences the programme of study for which he seeks financial assistance. In the case of students qualifying under the provisions of (b) and (c) above, the year of residence within this Province need not be that immediately preceding this academic session, but

- the proviso exists that the student shall not have established residence of twelve consecutive months (excluding periods of postsecondary study) in another province or country
- (4) have completed successfully his last previous full-time full course load for an academic year of two terms or two semesters, without a failure in any course requisite for unconditional admission to the next higher academic session. Students allowed to advance while carrying a deficiency of academic credits may not be eligible for assistance under the Provincial Grant Plan until the deficiency is made up.

The Provincial Grants may be granted only to students in full attendance in a full programme of undergraduate or equivalent level of postsecondary studies. These awards are not open to students in graduate studies or registered as "qualifying" or "unclassified" students.

The form of: "APPLICATION FOR FINANCIAL ASSISTANCE" and the accompanying "INFORMATION BROCHURE" are available from the Financial Aid Officer of the designated institution the applicant is (or will be) attending in British Columbia. British Columbia students attending institutions outside this Province should apply directly to: Student Services Branch, Department of Education, Parliament Buildings, Victoria, B.C.

BRITISH COLUMBIA CULTURAL FUND AWARDS - A limited number of awards valued at three quarters (3/4) of tuition fees, will be made annually upon the recommendation of the Faculty of Fine Arts. Students planning to attend other recognized institutions in the cultural field should apply directly to the Provincial Secretary, Parliament Buildings, Victoria, B.C.

NANCY GREENE SCHOLARSHIPS - Twenty scholarships, each for seven hundred fifty dollars (\$750), will be awarded in 1976 to those British Columbia students who apply and who best combine the qualifications set out below. Any student currently registered in a senior secondary school (including independent and private schools) in British Columbia who plans to pursue an educational programme at any designated postsecondary educational institution in the Province of British Columbia is eligible to apply. Applicants must show evidence of good school and community participation and citizenship, leadership and character, scholastic achievement (a minimum average of C+ is mandatory in order for application to be considered) and athletic ability and performance.

Applicants are requested to complete the Nancy Greene Scholarship form and submit it along with a personal letter of application to the Secretary, Nancy Greene Scholarships at the address indicated below. The letter of application must specifically outline scholastic and athletic achievements in grades XI and XII, educational goals, and participation in school and community programmes and affairs, and should be written on 8½ by 11-inch paper. The applicant must request his or her school principal to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships. The principal is requested to attach a statement of grades or marks and a statement certifying athletic and other participation. The applicant must request one other prominent individual in the community to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Department of Education. Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

PREMIER'S ATHLETIC AWARDS/BRITISH COLUMBIA ATHLETIC AWARDS (For undergraduate students) — Five Premier's Athletic Awards, each for one thousand dollars (\$1,000) and 25 British Columbia Athletic Awards, each for five hundred dollars (\$500), awarded annually to those British Columbia students who apply and who meet the qualifications set out below.

Applicants must show evidence of athletic ability and performance, leadership and character, and scholastic achievement. eligible to apply for these awards if they are residents of British Columbia and are pursuing an educational programme at any designated post-secondary educational institution in the Province of British Columbia.

Applicants must write a personal letter of application to the Selection Committee, in which they should outline their athletic and scholastic achievements. They must ask the head of the athletic department of the post secondary education institution and one other prominent sports leader in the community to send a confidential supporting letter direct to the Selection Committee. The atheltic director should attach a statement of atheltic achievements and other leadership participation.

QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIPS (For graduate students) — Seven thousand dollars (\$7,000) awarded annually to one student commencing in the fall of that year. Normally the scholarship will be awarded in the amount of \$3,500 each year for two successive years of study, but the Committee may, in exceptional circumstances, award the full sum of \$7,000 for one year of study. In exceptional cases in which the scholarship winner finds it necessary to undertake a third year of post-graduate study to complete his/her training, he/she may apply during the second year of such studies for an additional scholarship of \$3,500.

This scholarship was formed to commemorate the visit of Queen Elizabeth II to British Columbia in May 1971 during the Centennial celebrations. The purpose of this scholarship is to enable selected British Columbians, who have graduated from a public university of the Province, to take further studies at approved universities (or equivalent institutions of higher learning) in the United Kingdom. The scholarship is administered through the Office of the Deputy Provincial Secretary by a special committee, headed by the Premier as Honorary Chairman. The special committee consists of representatives of the Provincial Secretary's office, the Department of Education, and each of the three public universities of the Province.

The scholarship will be awarded each year on a competitive basis to a graduate of Simon Fraser University, the University of British Columbia, or the University of Victoria

- (a) whose final three years of academic courses leading to his or her first undergraduate degree were all taken in British Columbia;
- (b) whose ordinary private domicile, home, or residence is, in the opinion of the Selection Committee, in British Columbia;
- (c) who is a Canadian citizen; and
- (d) who is not more than 25 years of age in the year in which he or she makes application, although the Selection Committee reserves the right to make exceptions to this rule.

Applicants should be persons of unusual worth and promise. The Selection Committee will make its selection on the basis of academic achievement, demonstrated aptitudes, personal qualities and character, interest and participation in university and community affairs, and proposed programmes of study. All decisions made by the Selection Committee are final.

A successful candidate may not accept other grants or awards unless approved by the Selection Committee. In accepting the award, a candidate assumes the responsibility of following the programme outlined in his or her application. The Selection Committee does not assume any responsibility for the admission or acceptance of a candidate by the institution where he or she proposes to study. If admission is not obtained, the award may be withdrawn. At the conclusion of the period of tenure on the scholarship, the holder is requested to send a brief report on his or her progress to the Selection Committee. The scholarship will be paid in equal amounts at intervals of six months. The first payment will be available prior to commencement of study on the scholarship. All inquiries, applications, and all documents pertaining to this scholarship must be forwarded directly to the Deputy Provincial Secretary, Legislative Buildings, Victoria, British Columbia. Applications for study commencing in the fall of 1977 must be submitted by March 1, 1977. Documents and applications, which cannot be returned, become the property of the Selection Committee.

- Each applicant must arrange for official transcripts of his or her postsecondary academic record to be forwarded directly to the Deputy Provincial Secretary's Office from the registrars of the institutions concerned.
- Each applicant must arrange for at least three confidential testimonials to be forwarded from persons who have a good knowledge of the applicant's ability, interests, achievements, character, and academic worth.
- 3. Each applicant must complete the official application form and forward it, along with a letter which includes
  - (a) a brief outline of the applicant's interest and participation in college and community affairs, and his or her special achievements and hobbies;

- (b) an outline of the programme of studies to be undertaken by the applicant if awarded the scholarship, including the name of the institution to be attended;
- (c) an outline of the applicant's future plans for a career;
- (d) additional information which the applicant considers to be in the interests of his or her application.

# SECTION 3

# UNIVERSITY BURSARIES REQUIRING APPLICATION

In May 1965, the Board of Governors established a Tuition Assistance Bursary Fund. The Board expressed its concern about the possibility of certain qualified students not being able to attend the University because of serious financial difficulties.

Students who make application for assistance under this Bursary Fund are reminded:

- a) that the Fund is intended to assist students who are in serious financial difficulty;
- that students who do not come from low-income families, as defined by the B.C. Student Aid Committee, should not normally expect to receive assistance. Where there are special circumstances, appropriate consideration will be given, and each case will be judged on its own merits;
- c) that applicants may be asked to interview a committee or an officer of the University;
- d) that, in general, only those students who are registered for a programme of courses which meet the requirements for the B.C. Student Assistance Programme are eligible for assistance, and that the fund is confined to those students who satisfy residence requirements necessary to obtain assistance through the Province of B.C.

Applications will be acceptable only after registration and must be submitted by dates specified on the application form. Application forms are available from the Financial Aid Office, Building "M".

Completed application forms should be returned to:

Financial Aid Office, University of Victoria, Victoria, B.C. V8W 2Y2

# SECTION 4

# UNDERGRADUATE AWARDS FOR WHICH NO APPLICATION IS NECESSARY

The awards listed in this section are open only to students who attended the University of Victoria in the regular Winter Session specified in this calendar. They are awarded automatically on the basis of merit or on nomination by departments and applications from students are not required. Except where terms and conditions of an award specifically state otherwise, award winners must return to the University of Victoria in the next regular session and must enrol in a full programme.

# For Heads of the Graduating Classes

- THE GOVERNOR-GENERAL'S MEDAL The Governor-General's Medal is awarded annually to the candidate in the Faculty of Arts and Science, registered for the B.A. or B.Sc. degree, who stands at the head of the graduating class on the basis of the graduating average.
- DR. MAXWELL A. CAMERON MEMORIAL MEDALS AND PRIZES—The British Columbia Teachers' Federation annually offers a silver medal and a prize to the student completing the final year of the B.Ed. degree (secondary programme), who achieves the highest standing in general proficiency with a first-class standing in practice teaching. A similar award is made to a student in the B.Ed. elementary programme. Selection of the students is left to the Faculty of Education, University of Victoria.

# Undergraduate Awards — General

BETA SIGMA PHI SORORITY CITY COUNCIL BURSARIES — Two awards of one hundred dollars (\$100) each to be awarded annually to two promising and deserving women students entering third or fourth year in Arts and Science or Education at the University of Victoria.

- BIRKS GOLD WATCH Offered by Henry Birks & Sons (B.C.) Ltd., of Victoria, and awarded annually to a first-class student who has made a valuable contribution to student life.
- BLANEY'S TRAVEL SERVICE LTD. AWARD An annual award of two hundred dollars (\$200) will be provided to a deserving and promising student who is returning to the University of Victoria in the following session. The selection will be made by the Senate Committee on
- \*THE BRITISH COLUMBIA 1958 CENTENNIAL SCHOLARSHIP -Seven Hundred Dollars (\$700) to be awarded annually to a student who has completed at least one year at the University of Victoria and who is continuing University studies in the Province of British Columbia. The award will be made on the basis of scholastic achievement and effective participation in campus activities.
- BRITISH COLUMBIA HYDRO AND POWER AUTHORITY SCHOL-ARSHIPS — Four scholarships of \$250 each to be awarded for general proficiency to students who have completed at least one year of studies at the University of Victoria. Winners must continue university studies in the following regular session.
- \*MARY HANNAH COOPER SCHOLARSHIP FUND An annual award of four hundred dollars (\$400) will be made to a worthy and deserving student. The selection will be made by the Senate Committee on Awards.
- \*MATTHEW COWAN ANNUAL SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to a promising student with high academic standing. The winner must continue at the University of Victoria.
- PERCY H. ELLIOTT MEMORIAL SCHOLARSHIP One hundred and thirty dollars (\$130) awarded to a student of outstanding merit and promise in one specific field of study, who has also a high high general academic standing and qualities of character indicating worthiness to hold the scholarship. The scholarship is awarded, upon the recommendation of the Committee on Awards, to a student in the first or second year, proceeding immediately towards a degree.
- FACULTY WOMEN'S CLUB SCHOLARSHIP Two hundred dollars (\$200) to be awarded to a deserving woman student continuing studies either at winter or summer session.
- FRANCIS GOLD WRIST WATCH To be presented each year by F. W. Francis, Ltd. to the student obtaining the highest average on the Sessional Examinations, with the provision that no student win it more than once.
- \*THE FRANK AND MARGARET GIBBS SCHOLARSHIPS Scholarships of up to three hundred dollars (\$300) each will be awarded in Arts, Sciences, Fine Arts, and Education, on the basis of distinction in scholarship. Award winners must continue academic work at an approved university.
- KIWANIS SCHOLARSHIP Two hundred and fifty dollars (\$250) awarded to a man student completing the first year and entering the second year at University of Victoria. Selection of the recipient to be made by the Senate Committee on Awards in conference with the Kiwanis Club of Victoria.
- \*THE HAZEL T. KNOX MEMORIAL SCHOLARSHIP Three hundred dollars (\$300) awarded annually to a deserving and promising student in an honours programme and continuing into the third or fourth year at the University of Victoria. If funds permit, additional awards of a similar nature will be made by the Senate Committee on Awards.
- \*THE ALAN PRATT MEMORIAL SCHOLARSHIP One hundred dollars (\$100) awarded annually to a student with broad interests completing second year.
- THE PRESIDENT'S SCHOLARSHIPS A number of scholarships up to the value of five hundred dollars (\$500) each will be awarded annually by the Senate Committee on Awards. Awards will be made in Arts, Sciences, Fine Arts, and Education, on the basis of distinction in scholarship. In making the awards, the Committee will take into account any other scholarships candidates have received. Award winners must return to the University of Victoria in the next regular session and must enrol in a full programme in order to retain the award.
- RITHET CONSOLIDATED LIMITED BURSARY One hundred dollars (\$100) to be offered to a promising student registered at the University of Victoria and continuing academic studies.

- \*THE EDWARD J. SAVANNAH MEMORIAL SCHOLARSHIP -Two hundred and fifty dollars (\$250), subscribed by his friends and former students, to be awarded annually to a student proceeding to third year science at the University of Victoria or elsewhere.
- THE ANDREW SHERET, LTD. SCHOLARSHIP One hundred and fifty dollars (\$150) to be awarded annually to a student achieving high academic standing and who is continuing studies at the University of Victoria.
- THE A. W. SHERET SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to a promising student with high academic standing who is continuing studies at the University of Victoria.
- UNIVERSITY EXTENSION ASSOCIATION OF VICTORIA SCHOL-ARSHIP - Two scholarships of one hundred dollars each (\$100) to be awarded to two worthy and promising students who are returning to the University in the following year.
- HE UNIVERSITY OF VICTORIA FACULTY ASSOCIATION SCHOLARSHIPS—Two scholarships, one of three hundred dollars (\$300), and one of two hundred dollars (\$200) to be awarded annually to further the education of a student of good academic standing.
- UNIVERSITY WOMEN'S CLUB SCHOLARSHIP Two hundred dollars (\$200) awarded to the woman student taking the highest standing in her first year of Arts and Science, and continuing her course in the second year at the University of Victoria or at any other university, provided the course desired is not available at this University. When a student wishes to attend a university outside Canada, the reasons for such attendance should be submitted to the Executive of the University Women's Club for approval.
- THE VICTORIA COUNCIL, UNITED COMMERCIAL TRAVELLERS OF AMERICA SCHOLARSHIP — One hundred dollars (\$100) awarded annually to the leading student of the Humanities in the second year. The winner must continue university studies.
- \*THE R. T. WALLACE SCHOLARSHIP Eight hundred dollars (\$800) awarded annually to a deserving and promising student entering the third or fourth year at the University of Victoria and taking an Honours Programme in the Humanities, Sciences or Social Sciences. If funds permit, additional awards may be allocated.
- \*THE WEBER MEMORIAL BURSARY One hundred and twentyfive (\$125) to be awarded annually in memory of Mr. and Mrs. E. Weber, to the most deserving student in the third year. Academic standing, citizenship and need are all to be taken into consideration.
- \*THE WESTAD SCHOLARSHIP This scholarship of two hundred and fifty dollars (\$250) is awarded annually for general proficiency to a student entering third or fourth year at the University of Victoria.
- THE WESTON BAKERIES, LIMITED, SCHOLARSHIP Two hundred and fifty dollars (\$250) to be awarded annually to a deserving student completing first or second year and continuing University studies.
- THE WOODWARD STORES, LIMITED, SCHOLARSHIP Two hundred and fifty dollars (\$250) to be awarded annually to an outstanding student completing first or second year and continuing University studies.

# Undergraduate Awards Listed by Course or Area of Study

### Anthropology

THE GRAND POST OF THE NATIVE SONS OF B.C. - BRUCE McKELVIE SCHOLARSHIP — Two hundred and fifty dollars (\$250) to be awarded annually to a third-year Anthropology student with the highest standing in a course relating to Anthropology in B.C. The student must be a Canadian citizen and must return to the University of Victoria in the next regular session.

# Biology

- THE HOWARD ENGLISH BURSARY The Victoria Fish & Game Protective Association will present a bursary in the amount of three hundred dollars (\$300) annually to a student entering fourth year in the Biological Sciences and who shows demonstrated interest in conservation, especially as applied to aquatic ecology (biology). Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.
- \* Administered by the University of Victoria Foundation.

- \*FREEMAN F. KING SCHOLARSHIP Three hundred dollars (\$300) awarded to a student entering third or fourth year, preferably the latter, and preparing for a career in natural history, considered in a broad sense. The award is to be based on high academic standing and demonstrated interest in field studies, especially in terrestrial biology. The recipient will be selected by the Senate Committee on Awards from candidates recommended by Biology Department staff members.
- \*B. W. PEARSE SCIENCE SCHOLARSHIPS Four scholarships of two hundred dollars (\$200) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.
- THE PROFESSIONAL MEN'S GARDEN CLUB OF VICTORIA SCHOLARSHIP—One hundred and fifty dollars (\$150) awarded annually to a third year student in Botany on the basis of academic attainment. The award is to be made on the recommendation of the Department of Biology.
- SEASPAN INTERNATIONAL LTD. SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.
- VICTORIA CENTRAL LIONS CLUB DR. G. C. CARL AWARD -One hundred and fifty dollars (\$150) awarded annually to the top first year student in the Department of Biology who is continuing similar studies at the University of Victoria.
- VICTORIA NATURAL HISTORY SOCIETY SCHOLARSHIP One hundred and twenty dollars (\$120) awarded to the most deserving student completing first or second year, specializing in Biology, and having a demonstrated interest in natural history.

#### Chemistry

- BAPCO PAINT LIMITED SCHOLARSHIP One hundred (\$100) to be awarded to a student majoring in Chemistry with the highest standing in second year and who continues studying Chemistry in the third year. Should the student receive another major (i.e. over \$500) scholarship, the Bapco scholarship should be awarded to the student with second highest standing subject to the same terms, or the third, etc. Selection will be made by the Committee on Awards in consultation with the Department of Chemistry.
- OCEAN CONSTRUCTION SUPPLIES LIMITED, SCHOLARSHIP -One hundred dollars (\$100) awarded annually to the student in first year who obtains the highest standing in Chemistry and who intends to continue studies at the University of Victoria or at any other university.
- \*B. W. PEARSE SCIENCE SCHOLARSHIPS Four scholarships of two hundred dollars (\$200) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.
- SEASPAN INTERNATIONAL LTD. SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

# Child Care

GREATER VICTORIA ASSOCIATION FOR THE RETARDED BUR-SARY - Two hundred and fifty dollars (\$250) awarded annually to a needy student in the third year of the Child Care Programme, specializing in the study and treatment of mentally retarded children. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Child Care Programme.

# Classics

CLASSICAL ASSOCIATION OF VANCOUVER ISLAND BOOK PRIZES — One prize (not exceeding \$50) or two prizes (not exceeding \$25 each) will be awarded annually by the Classical Association of Vancouver Island for excellence in the study of Classics. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Classics.

# **Creative Writing**

THE ROSALIND HULET PETCH MEMORIAL PRIZE IN CREA-TIVE WRITING - Two hundred dollars (\$200) to be awarded annually to an outstanding student in Creative Writing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Creative Writing.

#### **Economics**

- THE T. EATON COMPANY LIMITED SCHOLARSHIP Four hundred dollars (\$400) awarded annually to the third-year student who, in the opinion of the Department of Economics, is most proficient in the study of consumer behaviour under competitive market conditions. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics, to a student with a first-class average.
- THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BRITISH COLUMBIA AWARD - \$100 to be awarded to a needy student registered in second year who is proceeding to third year at The University of British Columbia. The student must have maintained a second-class standing in his last year, must have taken the accounting courses offered by the Department of Economics, and must intend to become a Chartered Accountant. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.
- \*THE GEORGE HAMILTON HARMAN MEMORIAL SCHOLAR-SHIPS — Two scholarships of two hundred dollars (\$200) each, made available by Miss Emily A. Harman of Toronto in memory of her late brother, will be awarded for proficiency in money and banking or in Economics.
- YORKSHIRE TRUST COMPANY SCHOLARSHIP One hundred and seventy-five dollars (\$175) awarded annually to the outstanding student in Commerce 151 who plans to continue University studies leading to a B.Comm. degree.

### Education

- \*THE G. CLIFFORD CARL MEMORIAL BURSARY Three hundred dollars (\$300) awarded annually to a deserving student entering third or fourth year in the Faculty of Education and specializing in the Biological Sciences. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.
- \*THE CLEARIHUE BURSARY Four hundred and fifty dollars (\$450) awarded annually by Dr. and Mrs. J. B. Clearihue to a promising and deserving student in the Faculty of Education, who shows promise and who has at least a good second class average.
- THE COMITAS CLUB SCHOLARSHIP One hundred dollars (\$100) to be awarded to a promising and deserving student from first, second or third year in the Faculty of Education who is returning for the following year.
- \*THE DENTON MEMORIAL BOOK PRIZE An annual book prize to a student in a professional year (elementary field) who has a first class standing in practice teaching and good general proficiency.
- \*THE H. O. ENGLISH SCHOLARSHIP Two hundred and fifty (\$250) dollars to be awarded annually for general proficiency and high standing in practice teaching to a student who is returning for further study in the Faculty of Education.
- THE GROLIER LIMITED AWARD The Grolier Curriculum Resource Library is a unique compilation of 49 volumes of reference including The New Book of Knowledge, Encyclopedia Canadiana, Book of Popular Science, Lands and Peoples, Standard Encyclopedic Dictionary and International Atlas, together with a bookcase, and is offered by Grolier Limited as a prize to be awarded to an outstanding student graduate in the elementary teaching field. Selection will be made by the Senate Committee on Awards.
- \*THE WILLIAM A. AND FRANCES E. HARPER SCHOLARSHIP-One hundred dollars (\$100) to be awarded annually to a deserving and promising student in the Faculty of Education.
- \*ROBERT BURNS McMICKING CHAPTER I.O.D.E. SCHOLARSHIP - Seventy-five dollars (\$75) to be presented annually to a student in the Faculty of Education who has shown outstanding ability in practice teaching, who has high academic standing in the field of kindergarten or primary education and who will be continuing studies in this field.
- ROSE'S LIMITED JEWELLERS WATCH To be awarded annually to the leading student in the Faculty of Education at the University of Victoria.
- \* Administered by the University of Victoria Foundation.

- \*THE TAYLOR EDUCATION BURSARIES Annual awards will be made to fourth year students showing outstanding ability and interest in Education and needing financial assistance. If no qualifying students are enrolled in the fourth year, the bursaries may be awarded the next year or be presented to qualified students of the fifth year, at the discretion of the Faculty of Education. The award commemorates the interest in Education by the Taylor family of Victoria.
- THE ROSALIND W. YOUNG SCHOLARSHIP Two hundred dollars (\$200) to be awarded annually by the University Women's Club of Victoria to the leading woman in first year Education who is continuing University studies.

### English

- THE BEAVER BOOKS SHOP PRIZE Donated to the student who stands first in the final examination in both English 121 and 122.
- \*THE EDGAR FERRAR CORBET SCHOLARSHIP Three hundred dollars (\$300) to be awarded annually for proficiency in English to a second year student who is a graduate of a British Co!umbia public high school and who will be majoring or honouring in English in the third
- \*MARTLET CHAPTER, I.O.D.E., CUTHBERT HOLMES ENGLISH HONOURS ESSAY SCHOLARSHIP A scholarship to the value of one hundred dollars (\$100) will be awarded annually to the student who has written the best English Honours Graduating Essay. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department.
- CHAPTER N. P.E.O. MEMORIAL PRIZE One hundred dollars (\$100) awarded annually by Chapter N. P.E.O. Sisterhood, to a woman student in first year for excellence in English.
- \*ROYAL INSTITUTION AND FRANK EATON MEMORIAL SCHOL-ARSHIP - One hundred (\$100) awarded to the student taking the highest standing in English of the second year.
- THE MADAME SANDERSON MEMORIAL SCHOLARSHIP Fifty dollars (\$50) offered annually to a promising student for excellence in English and French of the second year.
- THE MAY E. WOOTTON MEMORIAL SCHOLARSHIP One hundred dollars (\$100) to be awarded annually to the student who writes the best term essay in English 200. Selection is to be made by the Senate Committee on Awards on the recommendation of the Department of English.

#### French

- ALLIANCE FRANCAISE SCHOLARSHIP Two scholarships of one hundred dollars (\$100) each awarded: (1) to the student in the second year who has made the most progress in French and who intends to continue university work in this subject; (2) to the best student entering the fourth year of a Majors programme in French.
- \*THE ADELINE JULIENNE DELOUME MEMORIAL SCHOLAR-SHIPS — One hundred dollars (\$100) each to be awarded to the first year female student and the first year male student attaining the highest grades in French in first year university and intending to continue studies in French at the University of Victoria. Additional awards will be presented to students in the Honours and Major Programmes, up to a total of \$1,800.
- THE FRENCH GOVERNMENT BOOK PRIZES These prizes, the gift of the French government through the consulate in Vancouver, are awarded annually for excellence in French. Selection to be made by the French department.
- FRENCH GOVERNMENT MEDAL Awarded for excellence in French.
- THE MADAME SANDERSON MEMORIAL SCHOLARSHIP Fifty dollars (\$50) offered annually to a promising student for excellence in English and French of the second year.
- THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA - These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

#### Geography

\*THE DR. NORMAN BETHUNE MEMORIAL AWARD - An annual award of seventy-five (\$75) will be made available in memory of Dr.

- Norman Bethune. The award is to be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 464. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.
- SEASPAN INTERNATIONAL LTD. SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

### German

- AUSTRIAN GOVERNMENT BOOK PRIZES The Austrian Consulate awards book prizes to students in each undergraduate year showing proficiency in German Studies.
- \*THE J. BEATTIE MACLEAN SCHOLARSHIP One hundred dollars (\$100) awarded annually to a student of outstanding merit and promise in second or third year who intends to continue studies in German at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Languages and Literature.
- GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY BOOK PRIZES These book prizes, the gift of the Federal Republic of Germany through the Consulate General in Vancouver, are available for students in each undergraduate year showing proficiency in German
- THE ANGELINA NORRIS BURSARY Fifty dollars (\$50) awarded annually to a needy and deserving student of modern languages in his first, second or third year who is returning to the University to complete his studies. Preference will be given to a student of German, at the discretion of the Department.
- THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.
- \*THE CARL WEISSELBERGER MEMORIAL BOOK PRIZE to be awarded to a promising senior student in German on the recommenda-tion of the Department of Germanic Languages and Literature.

# History

- \*THE KATHLEEN AGNEW MEMORIAL SCHOLARSHIP Two hundred and fifty dollars (\$250) is granted for the purpose of stimulating the study of the History of Canada. If funds permit, an additional award of \$100 may be granted.
- B.C. HISTORICAL ASSOCIATION BOOK PRIZE Two prizes awarded to students attaining the highest marks in History 350 (History of the Canadian West).
- CANADIAN DAUGHTERS' LEAGUE, ASSEMBLY No. 5 GERT-RUDE M. RALSTON MEMORIAL BURSARY — One hundred dollars (\$100) awarded to a deserving student, preferably one in Canadian history.
- CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (Victoria Branch) BOOK PRIZE—An annual prize of fifty dollars (\$50) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: 1. the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; 2. and the leading student in Political Science
- LEON J. LADNER B.C. HISTORY SCHOLARSHIPS Two scholarships, one hundred dollars (\$100) to the best undergraduate student studying the History of British Columbia, and one hundred dollars (\$100) for the best graduating essay on the History of British Columbia.
- \*LADNER BOOK PRIZE FOR THE STUDY OF THE HISTORY OF BRITISH COLUMBIA — An annual book prize will be given to an outstanding student of the History of British Columbia. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of History.
- \*THE ALLAN AND ELIZABETH McKINNON SCHOLARSHIP An annual scholarship of \$350 will be awarded to a senior student of high academic standing engaged in a Major or Honours programme specializing in Canadian history, who has returned to formal education after an
- \*Administered by the University of Victoria Foundation.

absence, and who would find it difficult to resume studies without financial aid. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

- THE OAK BAY BUSINESS AND PROFESSIONAL WOMEN'S CLUB BURSARY One hundred dollars (\$100) to be awarded annually to a woman student who attains honours standing in History 350 History of the Canadian West.
- ROYAL UNITED SERVICES INSTITUTE OF VANCOUVER ISLAND BOOK PRIZES IN MILITARY HISTORY—Book prizes to the total value of \$50 will be awarded annually to the two students with the highest academic standing in each of the Canadian and European Military History courses. The two winners and the prizes will be selected by the Senate Committee on Awards upon the recommendation of the Professor teaching the two undergraduate military history courses involved.
- \*THE NORA LUGRIN SHAW MEMORIAL SCHOLARSHIP—Seventy-five dollars (\$75) to be awarded annually to the student of History who writes the best essay dealing with the Magna Carta, The Petition of Rights and The Bill of Rights as the Fountainhead of Constitutional Liberties. The award is to be made by the Senate Committee on Awards upon the recommendation of the Department of History.
- UNITED EMPIRE LOYALISTS ASSOCIATION OF CANADA, (VICTORIA BRANCH), BOOK PRIZE IN CANADIAN HISTORY—An annual book prize of twenty-five dollars (\$25) to be given an outstanding student of Canadian History in a senior level course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.
- VICTORIA MUNICIPAL CHAPTER, I.O.D.E. SCHOLARSHIP One hundred dollars (\$100) awarded to an outstanding student in Canadian History in any year.

# History in Art

\*MARTLET CHAPTER, I.O.D.E. PRIZE FOR SCHOLARSHIP IN HISTORY IN ART — An annual award of one hundred dollars (\$100) will be presented for excellence in History in Art. The winner will be selected by the Senate Committee on Awards on the recommendation of the Department of History in Art.

# Italian

- THE ITALIAN ASSISTANCE CENTRE BURSARY—Two hundred and fifty dollars (\$250) to be granted annually to a needy student who has shown good proficiency in the Italian language and who will be returning to the University of Victoria for further studies in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.
- THE GOVERNMENT OF ITALY BOOK PRIZES—These prizes, the gift of the Italian Government through the Consulate in Vancouver, are awarded annually for excellence in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.
- THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA—These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

# Law

A number of awards may be allocated by the Faculty of Law after registration in September.

# **Mathematics**

- \*B. W. PEARSE SCIENCE SCHOLARSHIPS Four scholarships of two hundred dollars (\$200) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.
- SEASPAN INTERNATIONAL LTD. SCHOLARSHIP—One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

#### Music

- \*THE HARRY AND FRANCES MARR ADASKIN SCHOLARSHIP IN MUSIC HISTORY An annual award of \$150.00 given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to an outstanding music history major entering the final year of undergraduate study and planning to go on to graduate study in musicology. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Department of Music.
- \*THE MURRAY AND FRANCES JAMES ADASKIN SCHOLARSHIP IN VIOLIN OR VIOLA—An annual award of \$150.00 given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to a student violinist or violist entering the third or fourth year of study in the performance programme. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Department of Music.
- \*THE HAROLD BECKWITH MEMORIAL BOOK PRIZE IN MUSIC

   Given in memory of Harold Arthur Beckwith by his family. Awarded
  to a graduating Bachelor of Music student for excellence in music.
  Selection to be made by the Senate Committee on Awards upon the
  recommendation of the Department of Music.
- BMI CANADA An annual award of fifty dollars (\$50) to an outstanding undergraduate majoring in composition, given by BMI Canada Limited. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Department of Music.
- \*THE IDA HALPERN MUSIC SCHOLARSHIP An annual award of one hundred fifty dollars (\$150) given in honour of Dr. Ida Halpern by Miss Rivkah Isaacs. The Scholarship is awarded to an outstanding student entering the third or fourth year of study toward the Bachelor of Music degree, and who is engaged in study of Western Canadian music, especially of the Western Indians. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Music.
- THE HARBORD SCHOLARSHIP IN MUSIC An annual scholarship of five hundred dollars (\$500), donated by Mr. and Mrs. Justin V. Harbord, will be available to an outstanding student in the second, third, or fourth year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards in consultation with the Department of Music.
- THE DENIS KING MEMORIAL SCHOLARSHIP IN MUSIC An annual scholarship of \$300 donated by the King family in memory of Denis King, who was a student in the Department of Music at the time of his death in 1972. The award will be made to an outstanding third-year student in Composition or Voice. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Department of Music.
- \*THE REBECCA AND ESTHER LAZARUS SCHOLARSHIPS IN MUSIC Two annual awards each of \$150.00 made available by Miss Rivkah Isaacs for outstanding performers entering the third of fourth year of the University music programme. One is to be given to a singer in memory of Rebecca Lazarus Isaacs, and the other to a pianist in memory of Esther Lazarus Levy. In the case of two equally gifted candidates for either or both of the above, need is to be the determining factor. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Department of Music.
- \*THE TAYLOR SCHOLARSHIP IN MUSIC An annual scholarship will be available to an outstanding student in any year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Music. The award is presented in honour of Dr. M. G. Taylor, the first President of the University of Victoria, and Mrs. Taylor, and is administered by the University of Victoria Foundation. If funds permit, additional awards may be made.

# Nursing

- THE LILY IRENE HARRIS MEMORIAL BURSARY An annual bursary will be provided to a needy female student registered in her first year in the School of Nursing. According to the wish of Miss Harris who
- \*Administered by the University of Victoria Foundation.

was a teacher of nursing in China for many years, preference is to be given to a Landed Immigrant from China. If no such student be enrolled, the bursary may be awarded to a student demonstrating genuine need. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

#### Philosophy

- THE DAVID KAPLAN BOOK PRIZE IN HONOURS PHILOSOPHY
   Offered annually to the student graduating in Honours Philosophy
  with the highest standing in those philosophy courses required for the
  Degree.
- THE ANN TERESA WOODS BOOK PRIZE IN PHILOSOPHY— Offered annually to the student graduating with a Major in Philosophy with the highest standing in those philosophy courses required for the Degree.
- THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL BURSARY Twenty-five dollars (\$25) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

#### **Physics**

- THE BRITISH COLUMBIA TELEPHONE COMPANY SCHOLAR-SHIP — One hundred dollars (\$100) awarded to a student of first or second year for excellence in Physics. The winner must continue university studies.
- THE DON INGHAM MEMORIAL SCHOLARSHIP This scholarship of two hundred dollars (\$200) is awarded annually by the Victoria Newspaper Guild, Local 223, A.N.G., in memory of Don Ingham, widely-known journalist and amateur astronomer. The scholarship will be awarded to the student in Astronomy 200 who stands first in that course and who is returning to the University of Victoria and planning to take further courses in Astronomy.
- \*B. W. PEARSE SCIENCE SCHOLARSHIPS Four scholarships of two hundred dollars (\$200) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.
- SEASPAN INTERNATIONAL LTD. SCHOLARSHIP—One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.
- THE WOODS TRUST SCHOLARSHIPS Awarded annually to promising students at the University of Victoria who intend to pursue studies as undergraduates at the university or as post-graduate students at other universities or educational institutions or at any industrial or commercial concern engaged in the field of electrical engineering or in any allied field in the physical sciences. The scholarships are valued at three hundred dollars (\$300) each.

#### **Political Science**

- CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (Victoria Branch) BOOK PRIZE—An annual prize of fifty dollars (\$50) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: 1. the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; 2. and the leading student in Political Science 240.
- THE LADY LAURIER CLUB SCHOLARSHIP Two hundred dollars (\$200) to be awarded annually by the Lady Laurier Club of Oak Bay to a worthy and deserving student entering fourth year at the University and undertaking a course in Political Sicence.
- \*THE ROBERT LORNE STANFIELD BOOK PRIZES IN POLITICAL SCIENCE To be awarded annually to the top two students in each of Political Science 100 and Political Science 360.

#### **Psychology**

ROTARY CLUB OF SAANICH SCHOLARSHIP — One hundred dollars (\$100) to be awarded annually to the full-time third year student who obtains the highest standing in two upper year Psychology courses and is continuing studies at the University of Victoria or at some other recognized university.

- THE B.C. PSYCHOLOGICAL ASSOCIATION GOLD MEDAL Awarded annually to a graduating student in the Honours Psychology programme who has demonstrated outstanding achievement in the study of Psychology.
- THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL BURSARY—Twenty-five dollars (\$25) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

#### Russian

- \*THE MICHAEL DANE MEMORIAL BOOK PRIZE IN RUSSIAN—An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic and Oriental Studies.
- \*THE J. B. WOOD BOOK PRIZE IN RUSSIAN An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic and Oriental Studies.

#### Serbo-Croatian

GOVERNMENT OF THE SOCIALIST REPUBLIC OF YUGOSLAVIA BOOK PRIZE—An annual book prize will be awarded to the best student in Serbo-Croatian. Selection to be made by the Senate Committee on Awards upon the recommendation of the Department of Slavonic and Oriental Studies.

#### Sociology

- THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL BURSARY—Twenty-five dollars (\$25) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.
- THE OPEN DOOR SOCIETY BOOK PRIZE Awarded annually to the student in the Third or Fourth year of the programme leading to the Bachelor of Arts with Major in Social Welfare who writes the best essay on the subject of placing children of interracial parentage in adoption.
- \*THE VICTORIA UNIT OF NATIONAL COUNCIL OF JEWISH WOMEN BOOK PRIZE A prize will be given to the best student taking Sociology 335 (Minority and Ethnic Group Relations). The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of Sociology.

#### Spanish

THE SPANISH GOVERNMENT BOOK PRIZE — Awarded to the best student in a senior Spanish course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

#### **Theatre**

- \*CRESTVIEW-CHELSEA THEATRE AWARD An award of one hundred and fifty dollars (\$150) will be offered at the discretion of the Theatre Division to a promising and deserving student in Theatre who is continuing at the University of Victoria.
- \*GWEN DOWNES MEMORIAL BOOK PRIZE Awarded to the student who gives the best performance in a university play.
- \*THE DOROTHY SOMERSET SCHOLARSHIP IN THEATRE An annual scholarship of \$150, made available by Miss Rivkah Isaacs of Victoria, will be awarded to that third or fourth-year student who, in the opinion of the Department of Theatre, displays outstanding talent and devotion to any branch of theatre work. A third-year student must use the award to complete fourth-year studies at the University of Victoria Theatre Department; a fourth-year student is allowed the option of furthering studies at a recognized school of theatre, such as the National Theatre School or the Royal Academy of Dramatic Art. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

<sup>\*</sup>Administered by the University of Victoria Foundation.

#### Visual Arts

- FINE ARTS BURSARIES A variable number of bursaries are available each year to students registered in any year of the Visual Arts programme in the Faculty of Fine Arts on the basis of talent and need. The amount of each bursary is determined by funds available and the number of bursaries awarded. Selection to be made by the Senate Committee on Awards on the recommendation of the Department of Visual Arts.
- VICTORIA CENTRAL LIONS CLUB—MILLARD H. MOONEY FINE ARTS BURSARY—One hundred and fifty dollars (\$150) awarded annually to a worthy and talented student registered in the Department of Visual Arts in the Faculty of Fine Arts in first, second or third year on condition that the student return to the University of Victoria the following year.

### SECTION 5

# UNDERGRADUATE AWARDS FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

These awards are open only to students who attended the University of Victoria in the Winter Session specified in this calendar. Application for these awards must be made before April 30, unless otherwise indicated, on forms available in the Financial Aid Office.

- THE BIRKS FAMILY FOUNDATION The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian Universities for the creation of the Birks Family Foundation Bursaries.
  - The Bursaries are awarded by the Foundation on the recommendation of the University Scholarship Committee and are not restricted to faculty or year and may be renewed. The number and amount of such awards may vary annually, depending upon the funds available for this purpose from the Foundation.
- CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION, INC. (GREATER VICTORIA BRANCH) BURSARY One hundred dollars (\$100) to be awarded annually to a student who has completed first year and is proceeding to either a B.Ed. degree with a Major in P.E. or to a B.P.E. degree. Applicants should further demonstrate a need for assistance, and show evidence of a particular interest and aptitude in P.E. and general proficiency in academic work. Selection of candidates is to be made by the C.A.H.P.E.R. Awards Committee on the basis of applications submitted to the Committee on Awards of the University before April 30 in each academic year.
- THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLAR-SHIPS—C.U.P.E. will make available the sum of five hundred dollars (\$500) to provide scholarships for two deserving and promising students at the University of Victoria who are continuing their studies here. The selection will be made on the basis of academic standing. Preference will be given to sons or daughters of members of the C.U.P.E. In each case, the student must make application for these scholarships.
- \*LUCY AND MARGARET CORBET SCHOLARSHIP Three hundred and fifty dollars (\$350) awarded annually to a student who has completed pre-medical studies at the University of Victoria and is proceeding to medical school in September. Selection of the winner will be made by the Senate Committee on Awards on the basis of sound academic achievement and demonstrated financial need. Candidates must provide written acceptance of their entry into an approved medical school.
- THE ARTHUR S. DENNY SCHOLARSHIP—One hundred dollars (\$100) awarded annually by the Standard Furniture Co. to a deserving student in any year with a good academic record who is continuing studies at the University of Victoria. Preference will be given to students who indicate an interest in interior design, industrial design, or commerce as a career. Apply before April 30th to the Committee on Awards.
- THE IBM THOMAS J. WATSON MEMORIAL BURSARY PROGRAMME IBM makes available \$1,000 annually to the University of Victoria and to other universities to provide undergraduate bursaries known as the IBM-Thomas J. Watson Memorial Bursary Programme. The objective of the programme is to provide financial assistance to needy undergraduates in any year of any faculty who have good academic standing. These bursaries may be held concurrently with other awards, provided the University is satisfied that a need exists. Apply to the Committee on Awards, University of Victoria.

- ROBERT H. B. KER SCHOLARSHIP Two hundred dollars (\$200) awarded to a student in the first year who is proceeding to the second year either at the University of Victoria or a Canadian university. The Applicant must have been a cadet (Sea, Army or Air) for at least two years during his last three years of high school. If there be no such applicant, the Committee on Awards may recommend for the award a student who has satisfactorily completed first or second year at the University of Victoria and is enrolled for service in one of the University training units. Application must be accompanied by a certificate from the Cadet unit concerned. Selection of the winner is to be made by the Senate Committee on Awards in consultation with the donor, Mr. R. H. B. Ker.
- \*THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY— Three hundred dollars (\$300) awarded annually to a second or third year student planning a career in medicine with overriding preference given to a female student with first class honours standing. Selection of the recipient will be made by the Senate Committee on Awards, and the applicant must be studying in the general area of the basic medical sciences, on a pre-medicine programme.
- PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY—A bursary of four hundred and fifty dollars (\$450) is offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this Company. Applicants must apply on the University Scholarship Form. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.
- THE HON. AND MRS. G. R. PEARKES PRIZE Fifty dollars (\$50) to be awarded annually by the Hon. and Mrs. G. R. Pearkes to the student who has taken Service Training and has highest academic standing among those returning to the University of Victoria.
- \*THE OLIVER PRENTICE MEMORIAL SAANICH ROTARY SCHOLARSHIP One hundred and fifty dollars (\$150) awarded annually to a student of outstanding merit and promise and qualities of character indicating worthiness to hold the scholarship, who is planning a business career and is continuing his studies at a recognized university or is articled to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.
- UNITED NATIONS ASSOCIATION (VICTORIA BRANCH) SCHOL-ARSHIP—One hundred dollars (\$100) awarded annually to a student entering third or fourth year with a high academic standing who has actively contributed to the educational work of the United Nations Association. Selection will be made by the Senate Committee on Awards in consultation with the Executive of the United Nations Association (Victoria Branch).
- \*THE UNIVERSITY CHALLENGE SCHOLARSHIPS One or more scholarships to a total of \$350 to be awarded annually from funds won on the CTV Television Programme "University Challenge" by Victoria teams. The fund was started in 1971 by a team consisting of Glen Paruk, Robert McDougall, Denis Johnston and Bruce Izard, coached by Professor Alfred Loft. The selection will be made by a joint Student-Faculty Committee under the Senate Committee on Awards on the basis of outstanding service by the candidate to the community and/or the University, coupled with proven high academic ability. Students may apply directly to the Committee or be nominated by a second party but the application must bear the nominee's signature and be accompanied by a letter from the nominator or nominee describing the nominee's qualifications to hold the scholarship.
- THE VICTORIA MEDICAL SOCIETY BURSARY Five hundred dollars (\$500) to be awarded annually to a second year student of outstanding merit and promise, who has a high general academic standing and qualities of character indicating worthiness to hold the bursary. Selection of the student will be made by the Senate Committee on Awards, and preference will be given to a needy student studying in the general area of the basic medical sciences, on a pre-medicine programme.
- THE VICTORIA MEDICAL SOCIETY SCHOLARSHIP—Five hundred dollars (\$500) is available to a student who wishes to pursue a career in Medicine, has completed at least two years of study at the University of Victoria, and is proceeding to a medical school in Canada next September. Candidates must possess those qualities of character and mind which will lead to success as a medical practitioner, and must have demonstrated sound academic achievement, with at least Second Class standing. Financial need will also be considered. Candidates must provide written acceptance of their entry into an approved medical school. The
- \* Administered by the University of Victoria Foundation.

award will be made by a committee consisting of representatives from the Committee on Awards of the University and the Victoria Medical Society Scholarship Committee, and will be paid through the Bursar of the medical school involved. The successful candidate will be notified in August. The award will be forfeited if the candidate has not entered medical school by January 1977, at the latest. Application forms are available from, and must be returned to, the Financial Aid Office before April 30.

- VICTORIA MUNICIPAL CHAPTER IMPERIAL ORDER OF THE DAUGHTERS OF THE EMPIRE SCHOLARSHIP - One hundred dollars (\$100) awarded annually to a first year student who is the child of a veteran of World War I or World War II. The recipient of the Scholarship must be recommended for general proficiency and worth by the Faculty, and must continue university work into the second year.
- VICTORIA REAL ESTATE BOARD AWARDS Three hundred dollars awarded annually as a scholarship, and three hundred dollars awarded annually as a bursary, to students registered at the University of Victoria who are sons or daughters of any Active Member of The Victoria Real Estate Board or any Member of The Victoria Society of Real Estate Salesmen. Selection of the recipient will be made by the Senate Committee on Awards.
- \*THE CHRISTOPHER E. WILKS MEMORIAL BURSARY FUND -This fund was established by Mr. Harry Wilks in memory of his beloved son, Christopher, who died accidentally in December 1974. The purpose of the fund is to financially assist deserving students to pursue an academic career who otherwise may be forced to postpone or discontinue their studies.

All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. Should circumstances arise where more students apply for assistance than available funds will cover, the decision as to which students will receive assistance will be governed by the areas of study, with preference given to studies in the Humanities. If their financial circumstances continue to warrant such assistance, bursaries may be granted to the same students in subsequent years while attending the University of Victoria.

## SECTION 6

### UNDERGRADUATE AWARDS ADMINISTERED BY THE UNIVERSITY AWARDS COMMITTEE, THE UNIVERSITY OF BRITISH COLUMBIA, 2075 WESTBROOK PLACE, VANCOUVER, B.C. V6T 1W5

Students who submit applications for scholarships or bursaries to the University of British Columbia and who are competing on the basis of attendance at the University of Victoria, must forward an official transcript of their academic record at the University of Victoria, preferably accompanying the application.

- (1) Scholarships which must be applied for by July 1 unless otherwise stated.
- GRAPHIC ARTS INTERNATIONAL UNION SCHOLARSHIP The Graphic Arts International Union Local 210 offers a scholarship in the amount of \$250 to students enrolled in a full academic programme of studies at the University of B.C., the University of Victoria or Simon Fraser University at the second year level or higher. The award will normally be made to the applicant with the highest standing as determined by the University Awards Committee, U.B.C. To be eligible an applicant must be a member, or the son, daughter or legal ward of a member in good standing of the Union. Those who wish to be considered must give full details of their own or their parents membership in the Union.
- THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSE-MEN'S UNION UNDERGRADUATE SCHOLARSHIPS - Three scholarships of \$350 each are offered to members, and sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They are open to students in attendance at the University of British Columbia, the University of Victoria, or Simon Fraser University who will continue in a full programme of studies in the next session in an undergraduate faculty. These scholarships will normally
- \* Administered by the University of Victoria Foundation.

be awarded to the candidates with highest standing as determined by the results of the Final Sessional Examinations conducted in April by the named universities. Candidates must notify the University Awards Committee by May 1 of their intention of competing. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high or to re-award scholarships if winners receive other scholarships of substantial value.

THE DR. H. B. KING MEMORIAL SCHOLARSHIP IN EDUCATION This scholarship of \$300 has been established by the Association of British Columbia School Superintendents as a memorial to Dr. H. B. King, who from 1939 to 1945 was Chief Inspector of Schools for British Columbia. For many years prior to 1939 Dr. King also served the Province of British Columbia with distinction and devotion as a teacher and principal, and as a technical adviser with the Department of Education. This scholarship will be awarded to a student who is proceeding to a degree or certificate in the teaching field and is taking a full course in the second year at any recognized Faculty of Education in a B.C. university. The award will be made on the basis of academic standing, personal qualities, interest and participation in school and community affairs, aptitude for teaching, and other factors.

#### (2) Bursaries which must be applied for by July 1, unless otherwise stated.

- BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES - Bursaries to a total of \$8,000, each with a maximum value of \$300, are offered by British Columbia Forest Products Limited to qualified legal dependents of employees who, by June 30 of the year in which the award is made, have or will have served with the Company for at least one year and whose earnings are limited (see Company brochure for details). They are open to students beginning or continuing studies in the fall in a full undergraduate programme of studies at the University of British Columbia, the University of Victoria, Simon Fraser University, or Notre Dame University of Nelson. Awards will be made at the discretion of The University of British Columbia to students selected on the basis of their academic standing and need for financial assistance. No award will normally be made, however, to a candidate who obtains an overall average of less than 60% or who is required to write supplementals to obtain clear standing in a full year's work. Winners of the Company's Entrance Scholarships will not be permitted to receive a Company Bursary in the same year. The application must contain the necessary details of family service with the Company.
- THE GLADYS LEDINGHAM AWARD A cash award of \$100, gift of the Victoria and District Parent-Teacher Council, is offered to students who are enrolled at the University of Victoria, the University of British Columbia or Simon Fraser University. It will be awarded to a student selected by the School of Librarianship, University of British Columbia, who has been accepted for the Master of Library Science degree. The winner will be selected on the basis of need and scholastic
- THE GRAND LODGE MASONIC BURSARIES The Grand Lodge of Antient Free and Accepted Masons of British Columbia annually offers bursaries in the range of \$200 to \$500 each with preference to the sons, daughters, and legal wards of active members of Masonic Lodges in British Columbia or of deceased members who, at the time of death, were active members of these Lodges. The purpose of these bursaries is to give assistance to students who, without financial aid, would find it impossible or difficult to continue their education at the post-secondary level. Selection of winners will be made by the University of British Columbia from applicants with satisfactory academic standing who are beginning or continuing undergraduate studies at any British Columbia University, the B.C. Institute of Technology, or a B.C. regional college, leading to a degree or certificate in any field. First preference will be given to applicants entering university or college from Grade XII and then to under-graduates in the second year of studies. The application must be accompanied by a letter from the Secretary of the Lodge indicating the appli-cant's association with the Lodge. Since a special committee considers applications for these bursaries, those who also wish to apply for other bursaries should submit a separate application form for them. Each application must be accompanied by a transcript of the student's academic record at the academic institution most recently attended. If the Grade XII record is not immediately available it must be forwarded at the first opportunity.
- THE VICTORIA HOME ECONOMICS AND DIETETIC ASSOCIATION BURSARY This bursary of \$200, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a woman student whose home is in Victoria or some centre on Vancouver Island, and who is entering the second, third or fourth year in the Department of Home Economics at the University of British Columbia. The award will be made on the basis of financial need to a student of good academic standing.

### UNDERGRADUATE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

- ANDRES WINES LTD. SCHOLARSHIP A scholarship of five hundred dollars (\$500) will be awarded to an undergraduate student at University of British Columbia, Simon Fraser University, or University of Victoria. This award will be made to a student who is the son or daughter of an employee of Andres Wines or grape grower shipping to Andres Wines. If no one is available in this category then it will be awarded to a student who will undertake a project in the field of winemaking either in Microbiology, Engineering, Chemistry, Agriculture or Economics. Application forms are available from Andres Wines (B.C.) Ltd. at 2120 Vintner Street, Port Moody, British Columbia V3H 1W8 and should be submitted no later than August 30. The award will be made by the donor.
- BRITISH COLUMBIA ASSOCIATION FOR THE MENTALLY RE-TARDED BURSARIES — Bursaries in various amounts are offered by the British Columbia Association for the Mentally Retarded to students in education, medicine, nursing, psychology, and social work in graduate or undergraduate programmes who: (a) are undertaking a full year, parttime or summer school course at a recognized University or College, and (b) intend to pursue studies related to mental retardation. Awards will be made on the basis of combined academic standing and need. Closing dates for submission of application forms are July 15 and December 15. Forms of application may be obtained from: British Columbia Association for the Mentally Retarded, Room 221, 119 West Pender Street, Vancouver 3, B.C.
- THE BAY SERVICE AWARD A Service Award offered by the Bay (Victoria) is open in competition to students completing Third Year Arts and proceeding to a higher year. Preference will be given to students interested in Department Store careers. To be eligible for this award applicants must qualify in respect to academic standing, ability and personality, and should be considering possible employment with the Bay on graduation. Under terms of the award, employment with the Bay will be guaranteed during the summer vacation preceding the fourth year at the University of Victoria. Subject to satisfactory performance, a winner will, on graduation, be given an opportunity to apply for an executive career with the Company. Interested students should apply to the Personnel Manager, The Bay, not later than March 15. Selection will be made by a representative of the Bay.
- ELIZABETH BENTLEY EASTERN STAR SCHOLARSHIPS The Order of the Eastern Star offers annually a number of scholarships to students who have completed at least two years of University courses. Scholarships are awarded on the basis of need, marks and difficulty of courses. Persons eligible are members, wives, husbands, fathers, mothers, sisters, brothers, sons, daughters, grandchildren or step-children of members of the Order of the Eastern Star of B.C. Applications should be sent to the local Eastern Star secretary by July 15.
- RAYMOND CREPAULT, Q.C. MEMORIAL SCHOLARSHIP In memory of Raymond Crepault, Q.C. and to commemorate his accomplishments and his special contribution to the Canadian broadcasting industry, as well as to emphasize his deep commitment, as a French Canadian, to the unity of Canada, the Raymond Crépault estate, Radiomutuel and The Canadian Association of Broadcasters are pleased to announce the creation of a scholarship to be granted to a person wishing to complete his training in journalism or communications with a view to subsequent service in electronic journalism (radio and/or television). This is an annual ward of \$2,500 which Radiomutuel will present on the occasion of the Annual meeting of the Canadian Association of Broadcasters. It is offered to any French speaking Canadian citizen interested in improving his or her skills in the area of electronic journalism (radio and/or television), through university training or the equivalent thereof, on a full-time basis, in a Canadian institution.

Nominations will be accepted from persons meeting any of the following requirements.

- University graduation in any discipline (first degree).
- University graduation or current studies in communications or journalism (first degree).
- Graduation in broadcasting (radio and TV) technology from a technical institute of recognized standing or the equivalent thereof.
- Current employment in broadcasting, but wishing to complete training in this field.

Relevant experience in electronic journalism or any related field could be a major asset.

A selection board of three persons appointed by the Canadian Association of Broadcasters, with the approval of Radiomutuel, will take the following factors into consideration.

1. The candidate's academic background;

- 2. The candidate's motivation;
- 3. Recommendations submitted by the candidate's professor, colleagues or employer, as the case may be;
- 4. The ability of the candidate to begin and, more particularly, to complete such studies:
- 5. The candidate's financial need:
- 6. Whether the candidate is, or not, a Canadian citizen.

The scholarship may be renewed for an additional year, according to the validity of the research project or that of the course content.

All applications must be submitted no later than February 28 of each year (as indicated by the postmark) to the Canadian Association of Broadcasters.

Additional information and application forms may be obtained from Mlle Danielle Langlais, Canadian Association of Broadcasters, P.O. Box 627, Station "B", Ottawa, Ont. K1P 5S2.

- FEDERATION OF FRANCO-COLUMBIANS SCHOLARSHIP An annual scholarship of \$1,000, awarded by the Federation of Franco-Columbians to a candidate wishing to undertake a year of study in a French-language university, preferably in Canada. Priority will be given to a student registered at a British Columbia University, having completed the equivalent of two full years of university study, having sufficient knowledge of French to study profitably at a French language university, intending to teach in the Province of British Columbia. Applications should be addressed to the Secretary of the Scholarship Committee, Federation of Franco-Columbians, 1013-B Brunette, Maillardville, B.C. The application must include: a letter in which the candidate outlines his reasons for applying, a copy of his academic transcript, two letters of recommendation to be sent directly to the Secretary of the Scholarship Committee. Applications must be received by March 1.
- THE INDEPENDENT ORDER OF ODD FELLOWS BURSARIES -Six bursaries of three hundred dollars (\$300) each, provided by the Grand Lodge of British Columbia, I.O.O.F., the Grand Encampment, and the Rebekah Assembly are available annually for students in any year of any faculty. The awards will be made by a joint committee consisting of two representatives from each of the Grand Bodies. All applicants must have direct connection with one or more branches of the Order, through parents, grandparents, or close relatives. Special consideration will be given to applicants with financial need. Full details of the awards and application forms may be obtained from the Secretary of any Odd Fellows Lodge or Rebekah Lodge by May 1 so that they may be received by the Committee not later than May 15. All applications must be sponsored by an Odd Fellows Lodge, Rebekah Lodge, or Encampment. The above Committee will award annually an additional bursary of \$200 to a student in a recognized theological college of university status. This bursary will be known as the Dr. A. M. Sanford Memorial Bursary. Applicants will follow the same procedure as for all other I.O.O.F. bursaries, except that family connections with the I.O.O.F. will not be required.
- LEONARD FOUNDATION SCHOLARSHIPS This National Foundation awards each year a number of scholarships for which students of the University of Victoria are eligible. Application forms, available from the Financial Aid Office, University of Victoria, should be forwarded to the Honorary Secretary of the Foundation, c/o Canada Permanent Trust Co., 320 Bay Street, Toronto 105, not later than March 31 of each year. Whenever possible these applications should be filed in February. The awards are made at the annual meeting of the General Committee on the fourth Friday in May.
- THE MARY MARCHI MEMORIAL BURSARY This bursary of \$350, a gift of the Kootenay Society for Handicapped Children, will be awarded annually to a deserving undergraduate student, who is presently studying in the field of special education or mental retardation, with the intention of continuing studies in that field. All applications from the University of Victoria will be screened by a special committee at the University of Victoria. The final decision will be made by a special bursary committee appointed by the Kootenay Society for Handicapped Children. Applications should be submitted to the Committee on Awards, Financial Aid Office, University of Victoria by April 30.
- MUNGO MARTIN MEMORIAL AWARDS will be made annually from the proceeds of the Mungo Martin Memorial Fund, raised by public subscription under the sponsorship of the B.C. Indian Arts Society of Victoria, B.C. These awards commemorate Mungo Martin, the late Kwakiutl chief, artist, philosopher and carver, who did so much to revive appreciation of Indian art and traditions of the Northwest Coast. The Fund is administered by a Board of Trustees appointed by the said Society for this purpose. The Board of Trustees is the sole authority adjudicating awards and its decisions are final. Awards are to be made in any amount or amounts in any year within the limitations of available

funds at the sole discretion of the Trustees. (Awards are normally expected to be from \$50 to \$300.) The purpose of the awards is to assist people of Indian racial background to further their education, vocational training, skills and competence in arts, handicrafts, and other worthy endeavours. Particular emphasis is made to those who seek to do creative work to further the artistic heritage of the Indian peoples, whether it be in painting, carving, music and dance, folklore, or lan-guage. While age and circumstances of qualifying candidates may vary considerably, preference will be given to young people.

Candidates for awards must be of Indian racial background and must be domiciled in the Province of British Columbia at the time of application. The recipient of an award may apply for a further award in a subsequent

Applications for awards should be made on forms provided by the Board of Trustees and may be mailed at any time for consideration to the following address: The Board of Trustees, Mungo Martin Memorial Awards Fund, c/o Mrs. H. Esselmont, Chairman, 3190 Rutledge Street, Victoria, B.C. Board meetings will be held at the call of the Chair early in the year and late in the summer.

THE MERRILL C. ROBINSON BURSARY FUND - The Merrill C. Robinson Bursary Fund is sponsored by the Canadian National Institute for the Blind to honour the long service to blind people given by the late Merrill C. Robinson, MBE, LL.D. This fund will be administered by a special committee of the CNIB Divisional Board, and will be used to assist blind students attending any university or college within the B.C.-Yukon Division other than the University of British Columbia. Awards will be made only to those who show evidence of ability and promise. Applications are to be directed to the Bursary Committee, Canadian National Institute for the Blind, British Columbia Division, 350 East 36th Avenue, Vancouver 15, B.C., before July 31.

PREMIER'S ATHLETIC AWARDS/BRITISH COLUMBIA ATHLETIC AWARDS — Five Premier's Athletic Awards, each for one thousand dollars (\$1,000) and 25 British Columbia Athletic Awards, each for five hundred dollars (\$500), awarded annually to those British Columbia students who apply and who meet the qualifications set out below.

Applicants must show evidence of athletic ability and performance, leadership and character, and scholastic achievement. Students are eligible to apply for these awards if they are residents of British Columbia and are pursuing an educational programme at any designated postsecondary education institution in the Province of British Columbia.

Applicants must write a personal letter of application to the Selection Committee, in which they should outline their athletic and scholastic achievements. They must ask the head of the athletic department of the post-secondary education institution and one other prominent sports leader in the community to send a confidential supporting letter direct to the Selection Committee. The atheltic director should attach a statement of athletic achievement and other leadership participation.

Applications will be reviewed by a Selection Committee appointed by the British Columbia Physical Fitness and Amateur Sports Fund Committee. The top five applicants selected by the Selection Committee will be awarded the Premier's Athletic Awards of \$1,000 each, and the next 25 applicants selected in order of merit will be awarded the B.C. Athletic Awards of \$500 each. The Athletic Awards will be made available to successful applicants after proof that he or she is attending the institution concerned provided they are not in receipt of a similar or other major award of \$500 or more. All applications should be postmarked not later than June 1, and should be addressed to Chairman, British Columbia Physical Fitness and Amateur Sports Fund Committee, Parliament Buildings, Victoria, British Columbia.

THE RHODES SCHOLARSHIPS — The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship of the value of approximately £1,550 per annum. This stipend consists of a direct payment to the University and the Scholar's College of approved fees plus a maintenance allowance of £900 per annum paid directly to the Scholar. The sum provided should be sufficient to enable a Scholar to meet necessary expenses for term-time and vacations but those who can afford to supplement it to a modest extent from their own resources are advised to do so. The cost of the voyage to and from England must be borne by the Scholar.

The Scholarship is tenable ordinarily for two years at Oxford University. A third year (at Oxford or elsewhere abroad) may be authorized in proper cases.

A candidate must be a male Canadian citizen or British subject and have been ordinarily resident in Canada for at least five years by October 1, 1976. A Rhodes Scholarship is forfeited by marriage after election, or during a scholar's first year of residence. Thereafter a Rhodes Scholar may marry and retain his stipend if he is able to give appropriate assurance of support and accommodation for his wife.

A candidate must be at least 19 but under 25 years of age on October 1, 1977.

He must have completed two years of university study by October 1,

A candidate may compete in a province in which he is eligible under either (a) or (b) below:

- (a) The province in which he is ordinarily resident. If he is ordinarily resident in the Northwest Territories he may compete in a province in which he is eligible under (b) or, if there is no such province, in Nova Scotia or New Brunswick.
- (b) The province in which his university study has taken place, provided that if he is ordinarily resident outside Newfoundland he may not compete in Newfoundland.

In that section of the will in which he defined the general type of scholar he desired, Mr. Rhodes mentioned four groups of qualities, the first two of which he considered most important:

- 1. Literary and scholastic attainments;
- Qualities of manhood, truth, courage, devotion to duty, sympathy, kindliness, unselfishness, and fellowship;
- 3. Exhibition of moral force of character and of instincts to lead and to take an interest in his fellows;
- 4. Physical vigour, as shown by fondness for and success in outdoor sports.

Some definite quality of distinction, whether in intellect or character, or both, is the most important requirement for a Rhodes Scholarship, and it is upon this that Committees will insist. Success in being elected to office in student organizations may or may not be evidence of leadership in the true sense of the word. Mr. Rhodes evidently regarded leadership as consisting in moral courage and an interest in one's fellow men quite as much as in the more aggressive qualities. Physical vigour is an essential qualification for a Rhodes Scholarship, but athletic prowess is of less importance than the moral qualities developed in playing outdoor games. Financial need does not give a special claim to a Scholarship. A candidate for a Scholarship is required to make application by October 25, 1976, and if elected, to go to Oxford in October 1977. Further information concerning the Scholarship and the opportunities for study at Oxford University may be obtained from Sholto Hebenton, 1830-505 Burrard Street, Vancouver 1, B.C.

ROTARY FOUNDATION - The newest educational activity of the Rotary Foundation, Undergraduate Scholarships are awarded to outstanding young men and women for one academic year of undergraduate study abroad.

A candidate for a 1977-78 Scholarship must be: unmarried; between the ages of 18 and 24 inclusive as of July 1, 1976; and have completed two years of undergraduate university-level work but not have attained the bachelor's degree or equivalent at the time that he begins his Scholarship year. He must be a citizen of the country in which his permanent residence and sponsoring Rotary club are located.

In this and all other programmes of the Rotary Foundation, a Rotarian, a dependent of a Rotarian, a child, stepchild, grandchild, brother or sister of a Rotarian, or any spouse thereof, is ineligible for an award.

An Undergraduate Scholarship covers the cost of round trip transportation between the Scholar's home and place of study, registration, tuition, laboratory and other school fees, necessary books and educational supplies, meals and lodging, incidental living costs, limited educational travel during the Scholarship year and, in specified instances, intensive language training in the country of study prior to the beginning of the regular academic year.

Awards may be made for study in any field, but not for independent or unsupervised research. Undergraduate Scholarships are awarded for one academic year of study in another country. They are not granted to students to continue studies already begun in a country. It is not expected or intended that an Undergraduate Scholarship will be used as part of a longer period of study abroad. In many cases it is not possible to obtain academic credit for work done during the Scholarship year. Each candidate should ascertain for himself, in advance, whether it will be possible to receive academic credit for courses taken or work completed during the year abroad.

Application for an Undergraduate Scholarship must be made through a Rotary club in the district in which the applicant's permanent residence is located or the district in which is located the school at which he is studying at the time of his application. The sponsoring Rotary club will provide the necessary application forms and explanatory literature. Rotary clubs may obtain this material from their district governor or the secretariat of Rotary International in December of each year. Application forms must be completed and returned to the Rotary Club by March

ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/ SCHOLARSHIPS — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled, or other veterans, but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2. The deadline date for application is May 31.

THE SONS OF NORWAY SCHOLARSHIPS — Three Scholarships of \$600 each are offered by Sons of Norway Foundation in Canada to students who have shown interest in Norwegian Culture, History or Language. They are open to students who show evidence of sound academic performance and financial need. The awards are tenable at any recognized Junior College, Vocational Institute, or University in B.C. and can be for any study year. Apply on Forms available at the Institution of your choice and give all pertinent information. Forward application, not later than July 30, to Sons of Norway Foundation in Canada, 6480 Grant Street, Burnaby 2, V5B 2K6.

UNIVERSITY WOMEN'S CLUB OF VICTORIA DIAMOND JUBILEE BURSARY — A bursary of \$100 will be awarded annually by the University Women's Club of Victoria, to a mature woman with a satisfactory academic standing, who, without financial aid, would find it difficult to resume her studies. The applicant should be returning to full-time or part-time studies at the University of Victoria. A letter of application, with two references, should include a brief explanation of how the proposed courses will improve the applicant's qualifications for employment. Applications should be filed during the fall term with the Financial Aid Office, University of Victoria, Victoria, B.C.

VANCOUVER FOUNDATION — Educational aid is offered through the Vancouver Foundation to a limited number of deserving students at institutions of higher learning in British Columbia. Applications will be judged on the basis of (a) academic standing; (b) contributions to the university, school or community; (c) financial need which cannot be satisfied through the usual avenues. Further information may be obtained by enquiring at the Financial Aid Office of the University of Victoria. Inquiries must be made before March 31.

THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOL-ARSHIP - Two scholarships of \$250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendents, male or female, of a member of the Royal Westminster Regiment Association, of a member of the Royal Westminster Regiment CA(M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e. the 47th, 104th or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants may be in their final year of secondary school or any year of post secondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee, The Royal Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for application is July 31.

THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN HOME ECONOMICS — A scholarship of \$250 will be awarded annually by the Woman's Institute of B.C. It is available to the daughter of a member of the Institute. The member must have been in good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Home Economics. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN AGRICULTURE — A scholarship of \$250 will be awarded annually by the Woman's Institute of B.C. It is available to the son or daughter of a member of the Institute. The member must have been in good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Agriculture. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

### SECTION 7

#### **AWARDS FOR GRADUATE STUDY**

### Awards Administered by the University of Victoria

#### UNIVERSITY OF VICTORIA FELLOWSHIPS:

University of Victoria Fellowships of \$3,600, September through April, may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time in the Faculty as candidates or provisional candidates for a degree. Upon recommendation of the Department or Faculty concerned, these Fellowships will be accompanied by a Summer Supplement of \$1,200, May through August, inclusive, for students working full time on their studies during that period. No duties are attached to these Fellowships and Supplements. Application should be made at the time of application for admission in the space provided on the Application Form. The deadline for Fellowship applications is February 18. Successful candidates will be notified by approximately March 31.

NOTE 1: Fellowship holders may not normally hold another major award, i.e. more than \$600.

NOTE 2: Fellowship holders may accept paid employment, provided that this does not exceed 100 hours, September through April.

#### UNIVERSITY OF VICTORIA GRADUATE SCHOLARSHIPS:

University of Victoria Graduate Scholarships of \$1,000, September through April, may be awarded by the Faculty of Graduate Studies to students of good academic standing registered full time as candidates or provisional candidates for a degree in the Faculty. Application should be made at the time of application for admission in the space provided on the Application Form. No duties are attached to these Scholarships. Application should be made at the time of application for admission in the space provided on the application form. Successful candidates will be notified by approximately March 31. Depending on the funds available, Summer Scholarships of \$500 each may be awarded, by competition, to existing Scholarship holders who are working full time in their studies during the Summer.

NOTE: Scholarship holders may accept paid employment of not more than 300 hours, September through April.

#### R. M. PETRIE MEMORIAL FELLOWSHIP

The R. M. Petrie Memorial Fellowship is granted annually to a highly qualified candidate who wishes to work towards a doctoral degree in Astronomy, in the University of Victoria. The award, valued at \$5,000 plus travel assistance, is tenable at the University of Victoria for a period of one year and is renewable for a second year if progress is satisfactory. Application should be made to the Petrie Fellowship Committee, Department of Physics, University of Victoria. Selection will be based upon the recommendation of this Committee to the Graduate Faculty Awards Committee.

### Confirmation of Awards

Within one month after the receipt of the notice of the above awards students must confirm to the Office of the Dean of Graduate Studies that they intend to accept. If this is not done, the awards will be forfeited and reassigned.

#### ASSISTANTSHIPS:

Graduate students may make application, through the Department or Faculty concerned, for paid employment as Academic Assistant, Research Assistant, Scientific Assistant, Laboratory Instructor. Such employment is negotiated through the Department concerned, not through the Faculty of Graduate Studies, at rates of pay determined by the University. No full-time graduate student may be gainfully employed, however, for more than 300 hours, September through April.

THE LEON J. LADNER B.C. HISTORY SCHOLARSHIP — Three hundred dollars (\$300) awarded annually for the best graduate thesis on the History of British Columbia. Selection is made by the Faculty of Graduate Studies Awards Committee, on the recommendation of the Chairman of the Department of History.

#### Awards Administered by Government and Other Organizations

There are many other Graduate Awards, not administered by the University of Victoria. Notices of these are posted in the Faculty of Graduate Studies Office. Information may also be obtained from the catalogue "Awards For Graduate Study and Research" which can be found in the Reference Division of the Library under REF HA743 81-541. Since these awards are subject to constant change, prospective applicants are advised to obtain further details from the Faculty of Graduate Studies Office, or directly from the administering agency. A brief description of some of the major awards follows:

#### CANADA COUNCIL GRANTS

#### Special M.A. Scholarships and The Queen's Fellowships

Field of Study: Various areas of the humanities or social sciences.

Eligibility: Canadian citizens in the final year of an Honours B.A. programme, with first-class standing. Candidate must be nominated by a faculty member of a Canadian university, not later than October 15.

Value: \$5,000 plus travel allowance for the award holder only. The Queen's Fellowships also include tuition fees.

Information and nomination forms can be obtained from the Office of the Dean of Graduate Studies.

#### Doctoral Fellowships

Field of Study: Various areas of the humanities or social sciences.

Eligibility: Persons who, by the time of taking up the award, must

- a. be registered in a programme of studies leading to a doctoral degree;
  - b. have completed one year of graduate studies beyond the Honours B.A. or its equivalent.

Value: Up to \$5,000 for students in the first two years of a doctoral programme, and up to \$6,000 for students who have completed the first two years of their programme.

Information on the above and other Canada Council awards are available from the Office of the Dean of Graduate Studies, together with some application forms.

NATIONAL RESEARCH COUNCIL OF CANADA — Postgraduate awards and a limited number of postdoctorate Fellowships are available in the fields of science, including physical geography and experimental psychology. Candidates must be Canadian citizens or landed immigrants resident in Canada. These Scholarships and Fellowships are awarded to men and women on equal terms, on the basis of high scholastic achievement and evidence of skill at research.

#### Postgraduate Scholarships

Postgraduate Scholarships valued at \$5,000 for 12 months, plus a travel grant if required, are awarded in two categories:

- a. for a first year of postgraduate study in Canada, in which case the award is not renewable, but recipients may apply for a Scholarship mentioned in "b" below for a second and succeeding years of graduate studies
- b. for a second or subsequent years of postgraduate study in Canada, renewable on the basis of certified reports of satisfactory progress. Only two such renewals may be granted.

Additional information on NRC awards may be obtained from the Office of the Dean of Graduate Studies. Application forms are made available through Departmental Offices in early October. The deadline for return of completed applications to the Chairman of the appropriate Department is usually early November.

ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA - The Association of Universities and Colleges of Canada administers a number of national and international programmes on behalf of Canadian and foreign donors. A comprehensive list of awards, including those offered by foreign governments for study abroad, is available from the Association and many are posted in the Office of the Dean of Graduate

General Eligibility: Unless otherwise indicated, these awards are offered to graduates of a Canadian university or college which is a member or affiliated to a member of the A.U.C.C., and are tenable at a similar institution.

Conditions of awards, closing dates and other factors vary, and those meeting the general eligibility requirements should write to the Director of Awards, A.U.C.C., 151 Slater Street, Ottawa 4, Ontario, for more complete information and application forms.

#### CANADIAN FEDERATION OF UNIVERSITY WOMEN FELLOW-SHIPS -

#### Margaret McWilliams Travelling Fellowship

One Fellowship awarded annually to a pre-doctoral woman scholar in any field of study. Value: \$3,500. Doctoral programme must be well advanced and the candidate must plan to continue the work outside Canada; for residents of Canada who may be studying elsewhere at the time of application.

#### Professional Fellowship

One or two Fellowships are awarded for any woman who wishes:

- a. to spend a year at an accredited Library School, School of Social Work or similar professional school, or
- b. to embark on a programme leading to an advanced degree after some years of experience in a particular field, or a lapse of time away from formal study

Applicant must be a Canadian resident holding a degree from a Canadian university. Value: \$2,500.

Further information about these two awards may be obtained from the Chairman of the Fellowship Committee, Miss Christine Irvine, Dean of Women, Shirreff Hall, Dalhousie University, Halifax, Nova Scotia.

CENTRAL MORTGAGE AND HOUSING FELLOWSHIPS - A large number of Fellowships are awarded annually for study in urban and regional planning and related fields, in approved Canadian universities and elsewhere. Candidates must be Canadian citizens or landed immigrants in Canada for not less than 18 months when applying.

Value: up to \$4,500 plus tuition and initial travel expense. In addition, a Fellow may receive an allowance of \$750 for each dependent child. Renewable up to three times.

Application forms are available from the Administrator, Advisory Group, Central Mortgage and Housing Corporation, Ottawa 7, Ontario, and must be submitted through the appropriate department of the university in which the student proposes to enroll. Applications for study at Canadian universities must be sent to CMHC by March 15; applications for study at universities outside Canada by April 15.

COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN -Under a Plan drawn up at a conference in Oxford, in 1959, each participating country of the Commonwealth offers a number of scholarships to students from other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travel costs, tuition fees, other university fees and a living allowance.

Details may be obtained from the relevant government office in the applicant's own country, or from the Canadian Commonwealth Scholarship and Fellowship Committee, c/o Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa 4, Ontario.

IMPERIAL OIL GRADUATE RESEARCH FELLOWSHIPS — Imperial Oil Limited offers a total of six Fellowships annually, three for pure and applied natural and/or exact sciences, and three for social sciences and humanities.

Eligibility: graduates of any approved university undertaking research leading to a doctoral degree, who are Canadian citizens;

Value: \$4,000 per annum, for a period up to three academic years.

Information and application forms are available from the Office of the Dean of Graduate Studies, or Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Ave., West, Toronto, Ont. M5W 1K3. Deadline for nominations is February 1.

INTERNATIONAL FELLOWSHIPS FOR WOMEN — The American Association of University Women Educational Foundation offers a variety of Fellowships, ranging in value from \$2,500 to \$5,000, particularly for women of Canada and other countries wishing to study in the United States. Application forms and information are available from: Chairman, Fellowships Committee, Canadian Federation of University Women, 14 Hirondelle Place, Don Mills, Ontario.

#### INTERNATIONAL DEVELOPMENT RESEARCH CENTRE -

#### Thesis Research Awards - Ph.D. Degree

The International Development Research Centre offers five awards for research in the field of international development, for tenure in a developing country. Consideration will be given to students in the fields of agriculture, food and nutrition sciences, population and health sciences, information sciences, social sciences and human resources, etc. Applicants must be Canadian citizens.

Value: \$5,500 plus allowance for dependents, travel, research, etc.

Application forms are available from the Office of the Dean of Graduate Studies, and must be submitted by January 31.

#### For Students from Developing Countries

Five comparable awards are available for students from developing countries in Canadian universities on a student visa. Tenure will normally be in the student's home country or another developing country.

Application forms are available from the Office of the Dean of Graduate Studies, and must be submitted by February 15.

DEPARTMENT OF NATIONAL DEFENCE SCHOLARSHIP - The Department of National Defence offers three Scholarships for military and strategic studies of interest to Canada which may comprise work in one or more of the following areas: National and International aspects of security, studies of strategic theory, alliances and United Nations, civil-military relations. Candidates must be Canadian citizens with an Honours Bachelor's Degree, or its equivalent.

Value: \$4,500 plus academic fees.

QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP (see also page 174.) — The purpose of this Scholarship is to enable selected British Columbians who have graduated from a public university in B.C. to take further studies at approved universities in the United Kingdom.

Number and Value: One Scholarship each year, for a total of \$7,000. (usually divided into two stipends for two successive years)

Eligibility: A graduate of the University of Victoria, University of British Columbia or Simon Fraser University;

- a, whose final 3 years of academic courses leading to his or her first undergraduate degree were all taken in British Columbia;
- b. whose ordinary domicile, home or residence is in B.C.;
- c. who is a Canadian citizen;
- d. who is not more than 25 years of age in the year of making application.

Applications are available in the Office of the Dean of Graduate Studies. All enquiries, applications and supporting documents must be forwarded directly to The Deputy Provincial Secretary, Legislative Building, Victoria, B.C.

THE J. H. STEWART REID MEMORIAL FELLOWSHIP - Open to graduate students in any field at a Canadian University, who are Canadian citizens.

Deadline: February 1. Value: \$3,000, renewable

Information and forms available from: Awards Officer, Canadian Association of University Teachers, 66 Lisgar Street, Ottawa, Ont. K2P 0C1.

FELLOWSHIPS IN TRANSPORTATION - Fellowships are offered by the Transportation Development Agency for full-time graduate study in any discipline related to transportation, and leading to an advanced degree for which there is a thesis requirement. Applicants must be Canadian citizens, and normally plan to study at a Canadian university.

Value: \$4,650 plus tuition fees. Deadline: January 15.

Information and applications are available from the Office of the Dean of Graduate Studies, or from Transportation Development Agency, 1000 Sherbrooke Street West, P.O. Box 549, Montreal, Quebec H3A 2R3.

## **SECTION 8**

### **LOAN FUNDS**

Enquiries relating to the following loan funds, and all applications for loans, should be addressed to the Financial Aid Office, M Building, unless

the description indicates otherwise.

Applications for Canada Student Loans should be made in advance of the opening of the session. Although loans in limited amounts may also be made during the session, provided funds are available, students should not begin attendance on the assumption that they will be eligible for or receive assistance. In particular, they must meet the requirements specified in the terms of the loan fund involved.

University Loans are not normally made to students until they have

registered at the University for a full winter session.

Students are also advised that adult guarantors satisfactory to the Financial Aid Office are required for loans administered by the University.

- B.C. Youth Foundation Loans Loans are available to young persons up to 30 years of age. The foundation lends money to pay fees and/or monthly amounts to assist with living expenses. Applicants should contact the Financial Aid Office, M Building, for further information.
- B.C. Provincial Government Financial Awards and Assistance Programme The Government of the Province of British Columbia has several programmes

of financial assistance for students undertaking studies in designated Post-Secondary Educational Institutions for 1976-77. The Department of Education will again sponsor a programme providing a combination of funds incorporating the Provincial GRANT and the Canada Student Loans Plans. A detailed brochure describing the programme will be available at your institution.

Canada Student Loans Plan - This is a plan introduced by the Federal Government to assist students who, without loan assistance, would be unable to pursue full time post secondary studies at a specified educational institution. The maximum loan for an academic year is \$1,800. Total loans to any student cannot exceed \$9,800. A loan of up to \$900 may be authorized for a single semester which is part of a longer programme of study. Borrowers under the plan are required to repay principal and interest by regular monthly instalments. (This information may be changed after this Calendar has been printed.)

Payments commence six months after the borrower ceases to be a full time student at a specified educational institution. No payments are made while the borrower is a full time student nor for six months thereafter. Interest during this period is paid by the Federal Government on behalf

of the student.

Need for loan assistance is determined by Provincial Loan Authorities in accordance with administrative criteria established for use throughout Canada. A parental contribution table is an integral part of the criteria and is applied in all cases where the student has not established financial independence as defined in the Canada Student Loans Plan. Students are expected to save a substantial amount of any income from summer or other employment. Students who apply for loans should consider carefully the repayment obligation being undertaken.

A student in need of a Canada Student Loan must, as a first step, obtain an application form from the institution he or she plans to attend. The application must be completed carefully and accurately by the student, and where applicable, by his parents. Applications require declarations by both the student and his or her parent that all information provided is correct.

When the application is completed it must be submitted to the Financial Awards Office of the British Columbia educational institution to be

P.E.O. Sisterhood Educational Loan Fund — Loans are available to women students in any year of a University course, and may be requested at any time. Maximum amount of a loan to any student is \$1800. Fourth year or graduate student may be granted loans and draw the maximum loan in one year. Undergraduates may apply for and be granted the maximum loan of \$1800 for two or more years of study but may draw only \$900 of the loan in one academic year. Freshmen must complete one term's work satisfactorily before making application. Loans are made for periods up to five years. A loan may be considered for a summer course. Interest at the rate of 4% is to be paid annually, and the student is expected to begin payment of the principal as soon as she is out of University and employed. Information may be obtained from Mrs. Harold G. Robinson, 860 Richmond Road, Victoria, B.C.

The University of Victoria Mature Student Fund — Through the generosity of the Alumni Association, a special fund valued at \$5,000 has been established to help mature students with pressing financial need. Assistance may be provided to students in the form of grants or repayable loans. For further information, contact the Financial Aid Office.

The University of Victoria Rotating Loan Fund — The University of Victoria has a small loan fund to assist students requiring financial assistance. This fund is intended to meet emergency situations, and not tuition costs. The loans are interest free and repayable during the summer following the academic year. Adult guarantors are required to co-sign all short-term loans.

Contributions to the University loan fund have been made through the generosity of the following donors:

The Peter Cubis Memorial Fund (Donated by the University of Victoria Alma Mater Society) ......\$9,000 The University of Victoria Alumni Association ...... 5,000 The Milva Reid Revolving Loan Fund ...... 500 The University Extension Association Centennial Loan Fund .... 400 The John C. Lort Revolving Loan Fund .....

The donors and the University share the hope that students who have had help from this fund will themselves help others as their means may allow, either by contributing to this fund or by establishing similar funds.

For further information regarding interviews and application forms, please contact the Financial Aid Office, M Building.

# SCHOLARSHIPS AND OTHER AWARDS 1974-75

*Throughout this list, an asterisk indicates that the award or scholarship is administered by the University of Victoria Foundation.
*The Harry and Frances Marr Adaskin Scholarship in Music History of \$150 Lorraine Dorothy Meretta Wilkie
*The Murray and Frances James Adaskin Scholarship in Violin or Viola of \$150
*The Kathleen Agnew Memorial Scholarship \$250
Aldyen Hamber I.O.D.E. Entrance Scholarship of \$250
Alliance Francaise Scholarships of \$100 each Stuart Aubrey Beaveridge Linda Kathleen Selby-Hele
Austrian Government Book Prizes Jeanette Germaine Macdonald William James Lee Christine Maria Helmer
Bapco Paint Limited Scholarship of \$100 James Brodie Cupples
The Beaver Books Shop Prize Mark Robert Limacher
*The Harold Beckwith Memorial Book Prize in Music
Beta Sigma Phi Sorority City Council Bursaries of \$200 each
*The Dr. Norman Bethune Memorial Award of \$75
The Birks Family Foundation Bursaries To Be Announced
Birks Gold Watch Louise Arlene Bayliss
Blaney's Travel Service Ltd. Award of \$200 Alan Frank Cook
*The British Columbia 1958 Centennial Scholarship of \$700 Louise Arlene Bayliss
The B.C. Historical Association Book Prize, William Douglas Alastair Wade Marie Anne Elliott
The British Columbia Hydro and Power Authority Scholarships of \$250 each
The B.C. Psychological Association Gold Medal
The British Columbia Telephone Company Scholarship of \$100 Ian Stanley Graham
Dr. Maxwell A. Cameron Memorial Medals and Prizes Penny Lynne Scholey Patricia June Hughes
Canadian Association for Health, Physical Education and Recreation, Inc. (Greater Victoria Branch) Bursary of \$100 To Be Announced
Canadian Daughters' League, Assembly No. 5, Gertrude M. Ralston Memorial Bursary of \$100
Canadian Institute of International Affairs (Victoria Branch) Book Prize
Canadian Union of Public Employees Entrance Scholarships of \$200 each
C I' II' (D.L. P C.L. l f

Canadian Union of Public Employees Scholarships of

\*The G. Clifford Carl Memorial Bursary of \$300, Brandon Mary Monteith

Janette Harriet Fraser

The Harbord Insurance Ltd. Entrance Scholarship of \$500
The Harbord Scholarship in Music of \$500 Sandra Leigh Pumfrey
*The George Hamilton Harman Memorial Scholarships of \$200 each
*The William A. and Frances E. Harper Scholarship of \$100
The IBM-Thomas J. Watson Memorial Bursaries of \$100 each
Lawrence Craig Leverman Brian Ralph Hudson Garrick Jang Anthony John Palmer Linda Diana Hill Robert Clair Claus Allen Robert Gunnarson Gwynneth Jean Williams Erika Gaspar
The Don Ingham Memorial Scholarship of \$200 John Edward Bernard
Institute of Chartered Accountants of British Columbia Scholarship of \$100
The Italian Assistance Centre Bursary of \$250 Mirella Grubell
The Government of Italy Book Prizes
Robert H. B. Ker Scholarship of \$200 Charles Michael Taylor
The Denis King Memorial Scholarship in Music of \$300
*The Freeman F. King Scholarship of \$300 James William Fyles
Kiwanis Scholarship of \$250 Barry Sue Ying Joe
*The Hazel T. Knox Memorial Scholarships \$300
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\$200 Susan Payne  Labatt Breweries of British Columbia Limited Entrance Scholarship of \$500 John Alexander Carr  *Ladner Book Prizes for the Study of the History of British Columbia Barbara Joan Mayfield Irene Elaine Robertson David Robert Boyse Dendy  Leon J. Ladner B.C. History Scholarship of \$100 David Robert Boyse Dendy  Lady Laurier Club Scholarship of \$200 William Edwin Cochrane  *The Rebecca and Esther Lazarus Scholarships in Music of \$150 each Jocelyn Lorraine Abbott Judith Anne Johnson  *The Dr. Douglas H. Taylor Lee Memorial Bursary of \$300 Maureen Anne Davies  *Sara and Jean MacDonald Entrance Bursaries of \$200 each Vera Valerie Agnes Stoelting Caroline Margaret Jantz Heather Maria Nast Danielle Anita Rehm Joan Marie Helyer
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Heather Nicol. Term expires March 31, 1978.

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Larry Ryan. Term expires March 31, 1978.

John E. Whitlam. Term expires March 31, 1978.

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Izzud-Din Pal, B.A., M.A., M.Sc., Ph.D. Term expires May 31, 1978.

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Alistair Palmer. Term expires May 31, 1976.

#### Member Elected by Employees:

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Charles B. Daniels, A.B., D.Phil. Term expires June 30, 1977.

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Marilyn E. Berry, B.A., B.L.S. (*Brit. Col.*), General Librarian, Reference. G. Robert Campbell, Systems Analyst.

John O. Dell, B.A., B.L.S. (Brit. Col.), General Librarian, Cataloguing.
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Howard B. Gerwing, B.A., B.L.S. (Brit. Col.), Special Collections Librarian.

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Donald E. Hamilton, B.A. (Mt. Allison), M.S.L. (West. Mich.), Education Librarian.

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George J. Hruby, M.Phil. (Charles), L.ès Sc.Mor. (Geneva), Ph.D., B.L.S. (Montreal), General Librarian, Cataloguing.

Hugh L. Irving, B.A., B.L.S. (Brit. Col.), Assistant Head, Cataloguing. David Isaak, B.A. (United Coll.), B.L.S. (Tor.), General Librarian, Reference.

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Donald J. White, B.A. (San Jose St.), M.L.S. (Rutgers), M.A. (Memorial), General Librarian, Reference.

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Judith F. Davis, B.A., B.L.S. (Brit. Col.), Records Officer.

Roy M. Easterbrook, B.A. (York), Applications Analyst.

Esme N. Foord, B.A., M.A. (Queen's), Ed.D. (Tor.), Director of Admission Services (to June 30, 1976).

Jean M. Groat, C.D., A.T.C.M., B.Ed. (U. of Vic.), Records Officer, Professional Programmes.

Louise Mirlin, B.A. (West. Ont.), Admissions Assistant.

Joanne R. Oliver, Education Liaison Officer.

Daphne M. Osborn, Mus.B. (Boston), Admissions Officer.

R. Allen Shimmin, Director of Registration and Scheduling.

Ronald E. Stevens, B.Sc. (U. of Vic.), Scheduling Officer.

E. Richard Trueman, B.A. (Calgary), Admissions and Records Officer; Administrative Assistant (Law).

Judith A. Wetter, B.A., M.A. (Alta.), Admissions Officer.

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#### PROFESSORS EMERITI

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C. Vyner Brooke, B.A., A.M., Ph.D., Professor Emeritus of Spanish.

Kathleen M. Christie, B.A., M.A., Professor Emerita of Education.

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Albion Wilfrid Johns, B.A., Professor Emeritus of Education.

Frederick Kriegel, 2nd State Cert., Vienna, Professor Emeritus of German.

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J. Beattie MacLean, B.A., M.A., Ph.D., Professor Emeritus of German.

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Bérangère B. Steel, L. ès L., Professor Emerita of French.

Robert T. D. Wallace, M.A., LL.D., Professor Emeritus of Mathematics.

#### **HONORARY DEGREE RECIPIENTS**

\*Charles Johnstone Armstrong, May 1961.

\*Rosalind W. Young, May 1961.

Jeffree Aikin Cunningham, May 1964.

Walter Charles Koerner, November 1964.

W. Kaye Lamb, November 1964.

H. Rocke Robertson, November 1964.

Louis-Albert Vachon, November 1964.

Bristow Guy Ballard, May 1965.

Thomas Rice Henn, May 1965.

Robert Wellington Mayhew, May 1965.

George Randolph Pearkes, May 1965.

Joseph Badenock Clearibue, May 1966.

Leon Johnson Ladner, May 1966.

Phyllis Gregory Ross, May 1966.

William Andrew Cecil Bennett, May 1966.

Donald Grant Creighton, May 1967.

Norman Alexander Robertson, May 1967.

Joseph Roberts Smallwood, May 1967.

Cyril J. Berkeley, May 1968.

George Forrester Davidson, May 1968.

William Bruce Hutchison, May 1968.

Constance Blytha Pearkes, May 1968.

George Woodcock, May 1968.

C. Northrop Frye, May 1969.

Sir Edmund Hillary, May 1969.

His Royal Highness The Prince Philip Duke of Edinburgh, November 1969.

Christopher Tunnard, May 1970.

George Charles Clutesi, May 1971.

Richard Biggerstaff Wilson, May 1971.

Jean Sutherland Boggs, May 1972.

Sir Hugh Springer, May 1972.

Robert Thomas Duff Wallace, May 1972.

Margaret Jean Clay, May 1973.

George Max Antony Grube, May 1973.

Jack Leonard Shadbolt, May 1973.

Walter Henry Gage, May 1974.

Sir Charles Wright, May 1974.

Wilfrid Bennett Lewis, May 1975.

Edmund Herman Lohbrunner, May 1975.

<sup>\*</sup>Under the former affiliation with the University of British Columbia.

## **STATISTICS**

## ENROLMENT 1975-76 AS OF DECEMBER 1, 1975

(Figures for 1974-75 are in brackets)

(Figures for 1974-75 are in brackets)		
Faculty of Arts and Science — Full Time*		
First Year Second Year Third Year Fourth Year	950 671 496	(1133) (832) (620) (488)
Unclassified as to year  Total in Faculty	$\frac{75}{3327}$	$\frac{(69)}{(3112)}$
Child Care Programme — Full Time*		
First Year	12	( 39)
Second Year	39 25	( 44) ( 20)
Fourth Year	0	( 15)
Total in Programme	97	( 122)
Faculty of Education — Full Time*		
Elementary:		
First Year	174 227	( 229) ( 209)
Third YearFourth Year	240 68	( 204) ( <b>6</b> 0)
Fifth Year	18	(60)
Diploma Programme	44	(48)
Post B.Ed. Degree (Elem.) 5th Year Programme Unclassified as to year	2 3	( 1)
Secondary:		, -,
First Year	132	(174)
Second Year	136	(116)
Third YearFourth Year	76 53	( 78) ( 46)
Fifth Year	37	(55)
Diploma Programme	86	(84)
Unclassified as to year	2	( 2)
Special Students	27	( 0)
Total in Faculty	1325	(1381)
Faculty of Fine Arts — Full Time*		
First Year	129	(120)
Second Year	121	(95)
Fourth Year	76 68	( 71) ( 59)
Unclassified as to year	7	(15)
Total in Faculty	401	( 360)
Faculty of Law:		
First Year	72	( 0)
Total in Faculty	72	( 0)
Total full-time undergraduates*	5222	(4975)
Total part-time undergraduates	1664	(1511)
Total Undergraduates	6886	(6486)

#### Faculty of Graduate Studies:

Full-time	248	(	207)
Part-time	159	(	189)
Total in Faculty	407	(	396)
School of Public Administration:			
Full-time	41	(	34)
Part-time	50	(	52)
Total in School	91	(	86)
Total Graduates	498	(	482)
Grand Total	7384		5968)

### STUDENTS OF NON-B.C. ORIGIN 1975-76

Determined by location of previous educational institution attended. (Figures for 1974-75 are in brackets.)

Alberta	266	(	241)
Saskatchewan	46	(	62)
Manitoba	40	(	41)
Ontario	223	ì	218)
Quebec	48	(	44)
New Brunswick	11	ì	13)
Nova Scotia	15	(	17)
Prince Edward Island	2	i	2)
Newfoundland	3	(	2)
Yukon	18	(	10)
Northwest Territories	1	ì	2)
Other countries	302	(	280)
	975	(	932)
		_	

### **DEGREES CONFERRED MAY 1975**

B.A. — 362; B.Sc. — 156; B.Ed. — 208; B.F.A. — 24; B.Mus. — 34; M.A. — 39; M.Ed. — 26; M.F.A. — 1; M.Sc. — 14; Ph.D. — 10; M.P.A. — 3. TOTAL — 877.

### BUILDINGS ON THE UNIVERSITY CAMPUS

Student Union Building (1962) addition (1976) Clearihue Building (1962) Classroom-Office Extension (1971) Third Wing (1976) Elliott Building (1963) Lecture Wing (1964) Emily Carr Hall (1964) Margaret Newton Hall (1964) McPherson Library (1964) addition (1973)	Campus Services Building (1965) MacLaurin Building (1966) Cornett Building (1966) Sir Arthur Currie Hall (1967) David Thompson Hall (1967) Sedgewick Building (1968) additions (1969, 1970) Lansdowne Residence Buildings (1969) Cunningham Building (1971) Saunders Building (1974) McKinnon Building (1975)
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<sup>\*</sup> Undergraduates registered in 12 units or more.

# INDEX I — FACULTY AND ADMINISTRATIVE AND ACADEMIC PROFESSIONAL STAFF

NOTE: Since the University Calendar goes to press in March, this list and lists under Faculties and Departments may be subject to some modification when the academic session begins.

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